

# Part 91

## General Operating and Flight Rules

This edition incorporates  
Changes 1 through 20

This FAA publication of the basic FAR Part 91, effective August 18, 1990,  
incorporates Amendments 91-211 through 91-254 (Preambles ordered separately)

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Reprinted  
October 1997





This revised Part 91, published as Part III (Amendment 91-211) in the *Federal Register* on August 18, 1989 (54 FR 34284), incorporates Amendments through 91-254.

Bold brackets [  ] throughout the regulation indicate the most recently changed or added material for that particular subpart. The amendment number and effective date of new material appear in bold brackets at the end of each affected section.

### **IMPORTANT NOTICE**

Part 91 is sold on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office; therefore, subscribers will receive changes to this part automatically.

The preamble will not be included in this part. If you wish to receive (free of charge) a particular preamble to FAR Part 91, send your request to:

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Distribution of changes to this part within the Federal Aviation Administration and other U.S. Government agencies will be made automatically by FAA in the same manner as distribution of this basic part.



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## NPRM ORDER FORM

**Please place the following on the Part 91 Notice of Rulemaking mailing list:**

A horizontal number line with 20 tick marks, labeled from 0 to 19. The line is used for plotting data points.

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## Part 91—General Operating and Flight Rules

In Change 19, Special Flight Rules in the Vicinity of Grand Canyon National Park was listed erroneously as Amendment 91-253; it should have been listed as SFAR 50-2. SFAR 50-2 was removed but has been reinstated. The SFAR 50-2 preambles and regulation are included in this change.

This change incorporates two amendments and three Special Federal Aviation Regulations:

Amendment 91-253, Operating Requirements: Domestic, Flag, Supplemental, Commuter, and On-Demand Operations: Editorial and Other Changes, adopted and effective March 12, 1997. This amendment affects §§ 91.23 and 91.323.

Amendment 91-254, Reduced Vertical Separation Minimum Operations, adopted March 27 and effective April 9, 1997. Sections 91.703, 91.705, 91.706, and Appendix C are revised and Appendix G is added.

SFAR 50-2, Special Flight Rules in the Vicinity of Grand Canyon National Park, adopted February 21 and effective May 1, 1997, reinstates this regulation.

SFAR 78, Special Flight Rules in the Vicinity of the Rocky Mountain National Park, adopted January 3 and effective February 7, 1997.

SFAR 79, Prohibition Against Certain Flights Within the Flight Information Region of the Democratic People's Republic of Korea (DPRK), adopted April 18 and effective April 24, 1997.

Bold brackets enclose the most recently changed or added material in each section. The amendment number and effective date of new material appear in bold brackets at the end of each section.

**Page Control Chart**

<b>Remove Pages</b>	<b>Dated</b>	<b>Insert Pages</b>	<b>Dated</b>
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S-5 through S-20	Ch. 19	S-5 through S-20	Ch. 20
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Suggest filing this transmittal at the beginning of the FAR. It will provide a method for determining that all changes have been received as listed in the current edition of AC 00-44, Status of Federal Aviation Regulations, and a check for determining if the FAR contains the proper pages.



**Part 91—General Operating and Flight Rules**

This change incorporates two amendments and one Special Federal Aviation Regulation (SFAR) and removes one SFAR:

Amendment 91-252, Stage 2 Airplane Operations, adopted November 21, 1996 and effective January 15, 1997. This amendment affects §§ 91.801, 91.851, 91.857, 91.867, and 91.877.

Amendment 91-253, Special Flight Rules in the Vicinity of Grand Canyon National Park, adopted December 24, 1996 and effective May 1, 1997. This amendment removes SFAR 50-2.

Special Federal Aviation Regulation 77, Prohibition Against Certain Flights Within the Territory and Airspace of Iraq, adopted and effective October 9, 1996.

Bold brackets indicate the most recently changed or added material.

**Page Control Chart**

Remove Pages	Dated	Insert Pages	Dated
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**Part 91—General Operating and Flight Rules**

This change incorporates Amendment 91–251, Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking and at Training Centers, adopted May 23 and effective August 1, 1996. Section 91.191 is revised and § 91.205 is amended by revising paragraph (f) and adding a new paragraph (g) and (h).

Bold brackets indicate the most recently changed or added material.

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**Page Control Chart**

<b>Remove Pages</b>	<b>Dated</b>	<b>Insert Pages</b>	<b>Dated</b>
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Subpart C	Ch. 16	Subpart C	Ch. 18

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**Part 91—General Operating and Flight Rules**

This change amends Special Federal Aviation Regulation (SFAR) No. 67, Prohibition Against Certain Flights Within the Territory and Airspace of Afghanistan, effective May 10, 1996; and incorporates

Amendment 91-250, Child Restraint Systems, adopted May 24 and effective September 3, 1996. Section 91.107 is revised.

Bold brackets indicate the most recently changed or added material.

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**Page Control Chart**

Remove Pages	Dated	Insert Pages	Dated
Subpart B	Ch. 15	Subpart B	Ch. 17
S-78-3 and S-78-4	Ch. 12	S-78-3 through S-78-6	Ch. 17
S-79 and S-80	Ch. 12	S-79 and S-80	Ch. 17

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## Part 91—General Operating and Flight Rules

This change incorporates two amendments and two Special Federal Aviation Regulations (SFARs):

Amendment 91-248, Airworthiness Standards; Systems and Equipment Rules Based on European Joint Aviation Requirements, adopted January 29 and effective March 11, 1996.

Amendment 91-249, Extended Overwater Operations With a Single Long-Range Communication System (LRCS) and a Single Long-Range Navigation System (LRNS) adopted February 20 and effective February 26, 1996.

SFAR No. 66-2, Indefinite Suspension of the Prohibition Against Certain Flights Between the U.S. and the Federal Republic of Yugoslavia (Serbia and Montenegro), effective January 2, 1996.

SFAR No. 74, Airspace and Flight Operations Requirements for the 1996 Summer Olympic Games, Atlanta, GA, effective March 13, 1996.

Bold brackets indicate the most recently changed or added material.

**Page Control Chart**

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**Part 91—General Operating and Flight Rules**

This change incorporates three amendments and two Special Federal Aviation Regulations (SFARs):

Amendment 91-245, Commuter Operations and General Certification and Operations Requirements, signed December 12, 1995, and effective January 19, 1996, which affects SFAR 50-2 and SFAR 71.

Amendment 91-246, Revision of Authority Citations, signed December 20, 1995, and effective December 28, 1995; and

Amendment 91-247, Special VFR Weather Minimums, signed December 18, 1995, and effective December 27, 1995; and

Bold brackets indicate the most recently changed or added material.

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**Page Control Chart**

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Subpart B	Ch. 14	Subpart B	Ch. 15
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**Part 91—General Operating and Flight Rules**

This change incorporates Amendment 91-244, Notification to Air Traffic Control (ATC) of Deviations from ATC Clearances in Response to Traffic Alert and Collision Avoidance System, adopted September 13, 1995. This final rule amends § 91.123 by revising paragraphs (a) and (c).

This change also incorporates two Special Federal Aviation Regulations (SFAR):

SFAR No. 61-2, Prohibition Against Certain Flights Between the United States and Iraq, effective September 21, 1995. SFAR 61-2 shall remain in effect until further notice.

SFAR No. 65-1, Prohibition Against Certain Flights Between the United States and Libya, effective September 20, 1995. SFAR 65-1 shall remain in effect until further notice.

Bold brackets indicate the most recently changed or added material.

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**Page Control Chart**

<b>Remove Pages</b>	<b>Dated</b>	<b>Insert Pages</b>	<b>Dated</b>
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Subpart B	Ch. 9	Subpart B	Ch. 14
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		S-66-1 through S-66-6	Ch. 14

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**Part 91—General Operating and Flight Rules**

This change incorporates Special Federal Aviation Regulation (SFAR) 50-2, Special Flight Rules in the Vicinity of the Grand Canyon National Park, adopted June 9, 1995. SFAR 50-2 expires June 15, 1997.

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**Page Control Chart**

<b>Remove Pages</b>	<b>Dated</b>	<b>Insert Pages</b>	<b>Dated</b>
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**Part 91—General Operating and Flight Rules**

This change incorporates two Special Federal Aviation Regulations (SFAR):

SFAR 67, Prohibition Against Certain Flights Within the Territory and Airspace of Afghanistan, adopted May 10, 1995, and

SFAR 66–2, Prohibition Against Certain Flights Between the United States and the Federal Republic of Yugoslavia (Serbia and Montenegro), adopted May 23, 1995. This final rule removes SFAR 66 and adds SFAR 66–2. It is effective May 31, 1995, and expires on June 2, 1997.

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**Page Control Chart**

Remove Pages	Dated	Insert Pages	Dated
S–73	Ch. 6	S–72–1 through S–74	Ch. 12
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**Part 91—General Operating and Flight Rules**

This change incorporates Amendment 91-243, Special Visual Flight Rules (SVFR); Denver, CO. The effective date is February 28, 1995, the opening date of the new airport.

Bold brackets indicate the most recently added material.

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**Page Control Chart**

<b>Remove Pages</b>	<b>Dated</b>	<b>Insert Pages</b>	<b>Dated</b>
Appendix D	Ch. 8	Appendix D	Ch. 11

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**Part 91—General Operating and Flight Rules**

This change incorporates Special Federal Aviation Regulation (SFAR) No. 71, Air Tour Operators in the State of Hawaii, issued September 22, 1994; it will expire on October 26, 1997.

Two Special Federal Aviation Regulations are removed:

SFAR 69, Removal of the Prohibition Against Certain Flights Between the United States and Haiti, effective October 16, 1994 (59 FR 53583, October 25, 1994); and

SFAR 68, Removal of the Prohibition Against Certain Flights Within the Territory and Air-space of Yemen, effective October 21, 1994 (59 FR 54383, October 31, 1994).

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**Page Control Chart**

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S-81 through S-91	Ch. 7	S-81 through S-95	Ch. 10

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**Part 91—General Operating and Flight Rules**

This change corrects an error that occurred in Amendment 91-240.

On April 12, 1994, the FAA issued a final rule (Amendment 91-240) amending the FAR governing temporary flight restrictions (59 FR 17450; April 12, 1994) by adding § 91.92. The FAA intended to put the new section with other regulations governing temporary flight restrictions. However, §§ 91.27 through 91.99 are reserved. Other flight restrictions are contained in §§ 91.137 through 91.143. The correction which appeared in 59 FR 37669, July 25, 1994, corrected the error by redesignating § 91.92 as new § 91.144. The attached subparts A and B reflect this correction.

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**Page Control Chart**

Remove Pages	Dated	Insert Pages	Dated
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Subpart B	Ch. 5	Subpart B	Ch. 9

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**Part 91—General Operating and Flight Rules**

This change incorporates two amendments:

Amendment 91-241, Special Visual Flight Rules (SVFR), Denver, CO, which delays the effective date of May 15, 1994 indefinitely; and

Amendment 91-242, Emergency Locator Transmitters, effective June 21, 1994. This amendment affects § 91.207.

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**Page Control Chart**

Remove Pages	Dated	Insert Pages	Dated
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**Part 91—General Operating and Flight Rules**

This change incorporates three Special Federal Aviation Regulations (SFAR):

SFAR 67, Prohibition Against Certain Flights Within the Territory and Airspace of Afghanistan. This SFAR, issued May 10, 1994, expires on May 10, 1995.

SFAR 68, Prohibition Against Certain Flights Within the Territory and Airspace of Yemen. This SFAR, issued May 10, 1994, also expires on May 10, 1995.

SFAR 69, Prohibition Against Certain Flights Between the United States and Haiti. This SFAR, issued May 13, 1994, expires on May 13, 1995.

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**Page Control Chart**

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**Part 91—General Operating and Flight Rules**

This change incorporates:

Amendment 91-240, Temporary Restriction of Instrument Approaches and Certain Visual Flight Rules Operations in High Barometric Weather Conditions, issued April 6, 1994, which adds § 91.92 to Subpart A; and

Special Federal Aviation Regulation Amendment 62-1, Alteration of the Denver Class B Airspace Area, issued September 14, 1993, which revises SFAR 62.

The publication of SFAR 64 contained errors in paragraph numbering. Pages S-65 and S-66 show the corrected SFAR 64 as published in 58 FR 62035, November 24, 1993.

Bold brackets indicate the most recently changed or added material.

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**Page Control Chart**

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**Part 91—General Operating and Flight Rules**

This change incorporates three amendments on Special Visual Flight Rules (SVFR)—Amendments 91-236, 91-237, and 91-238—which affect Appendix D.

This change also incorporates Amendment 91-239, Airspace Reclassification, issued March 7, which affects §§ 91.126, 91.127, and 91.130.

**Page Control Chart**

Remove Pages	Dated	Insert Pages	Dated
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**Part 91—General Operating and Flight Rules**

This change incorporates two amendments:

Amendment 91-234, Airspace Reclassification, issued September 15, which affects § 91.129;  
and

Amendment 91-235, Special Visual Flight Rules (SVFR) Operations, issued September 27,  
which affects §§ 91.155 and 91.157 and the heading of Section 3 to Appendix D.

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**Page Control Chart**

Remove Pages	Dated	Insert Pages	Dated
Subpart B	Ch. 3	Subpart B	Ch. 4
Appendix D	—	Appendix D	Ch. 4

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**Part 91—General Operating and Flight Rules**

This change incorporates two amendments on Airspace Reclassification, Amendment Nos. 91-232 and 91-233. Amendment 91-232, issued July 27, affects § 91.130; Amendment 91-233, issued August 10, affects § 91.117.

This change also incorporates Special Federal Aviation Regulation (SFAR) 66-1, Prohibition Against Certain Flights Between the United States and Yugoslavia. This SFAR, issued August 19, extends the termination date of SFAR 66 until August 26, 1994.

A typographical error was made on the page control chart in Change 2. Under "Remove Pages", third line, "S-1 through S-123" should read "S-1 through S-134". Please make this pen and ink change.

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**Page Control Chart**

Remove Pages	Dated	Insert Pages	Dated
Subpart B	Ch. 1 & 2	Subpart B	Ch. 3
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S-60	Ch. 2	S-60 through S-63	Ch. 3

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## Part 91—General Operating and Flight Rules

This change incorporates Special Federal Aviation Regulations No. 64, Special Flight Authorizations for Noise Restricted Aircraft, effective June 3, 1993, and corrects Section 91.117 by revising paragraph (b) effective September 16, 1993.

The Secretary of Transportation signed a final rule on November 23, 1992, Removal of Obsolete and Redundant Regulations. This final rule (57 FR 60725, December 22, 1992) removed the following Special Federal Aviation Regulations in Part 91 effective December 22, 1992: SFAR Nos. 21, 44-5, 44-6, 47, 57, 61.

Page Control Chart

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EFF. MAY 5, 1992  
 JUNE 15 & 19, 1992  
 JULY 30, 1992  
 OCTOBER 15, 1992  
 DECEMBER 31, 1992

## Part 91—General Operating and Flight Rules

This change incorporates four amendments and two Special Federal Aviation Regulations:

Amendment 91-228, Flight Recorders and Cockpit Voice Recorders, effective May 5, 1992;

Amendment 91-229, Air Traffic Control Radar Beacon System and Mode S Transponder Requirements in the National Airspace System, effective July 30, 1992;

Amendment 91-230, Primary Category, effective December 31, 1992;

Amendment 91-231, Miscellaneous Operational Requirements, effective October 15, 1992;

SFAR 50-2, Special Flight Rules in the Vicinity of the Grand Canyon National Park, effective June 15, 1992, and

SFAR 66, Prohibition Against Certain Flights Between the United States and Yugoslavia, effective June 19, 1992.

Bold brackets throughout the regulation indicate the most recent changed or added material for that particular subpart. The amendment number and effective date of the new material appear in bold brackets at the end of each affected section.

### Page Control Chart

Remove Pages	Dated	Insert Pages	Dated
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Subpart G	—	Subpart G	Ch. 1
S-1 thru S-123	—	S-1 thru S-134	Ch. 1

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91.9	Civil aircraft flight manual, marking, and placard requirements .....	Sub. A-1
91.11	Prohibition against interference with crewmembers .....	Sub. A-2
91.13	Careless or reckless operation .....	Sub. A-2
91.15	Dropping objects .....	Sub. A-2
91.17	Alcohol or drugs .....	Sub. A-2
91.19	Carriage of narcotic drugs, marijuana, and depressant or stimulant drugs or substances .....	Sub. A-2
91.21	Portable electronic devices .....	Sub. A-3
91.23	Truth-in-leasing clause requirement in leases and conditional sales contracts .....	Sub. A-3
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91.105	Flight crewmembers at stations .....	Sub. B-1
91.107	Use of safety belts, shoulder harnesses, and child restraint systems .....	Sub. B-1
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91.111	Operating near other aircraft .....	Sub. B-3
91.113	Right-of-way rules: Except water operations .....	Sub. B-3
91.115	Right-of-way rules: Water operations .....	Sub. B-3
91.117	Aircraft speed .....	Sub. B-3
91.119	Minimum safe altitudes: General .....	Sub. B-4
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91.127	Operating on or in the vicinity of an airport in Class E airspace .....	Sub. B-5
91.129	Operations in Class D airspace .....	Sub. B-6

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91.139	Emergency air traffic rules .....	Sub. B-10
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91.143	Flight limitation in the proximity of space flight operations ....	Sub. B-10
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91.149	[Reserved] .....	Sub. B-10

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91.153	VFR flight plan: Information required .....	Sub. B-11
91.155	Basic VFR weather minimums .....	Sub. B-11
91.157	Special VFR weather minimums .....	Sub. B-12
91.159	VFR cruising altitude or flight level .....	Sub. B-13
91.161-		
91.165	[Reserved] .....	Sub. B-13

#### Instrument Flight Rules

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91.171	VOR equipment check for IFR operations .....	Sub. B-14
91.173	ATC clearance and flight plan required .....	Sub. B-14
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91.183	IFR radio communications .....	Sub. B-17
91.185	IFR operations: Two-way radio communications failure .....	Sub. B-17
91.187	Operation under IFR in controlled airspace: Malfunction reports .....	Sub. B-18
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#### Subpart C—Equipment, Instrument, and Certificate Requirements

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91.207	Emergency locator transmitters .....	Sub. C-3
91.209	Aircraft lights .....	Sub. C-4
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**Part 91—General Operating and Flight Rules**  
**Subpart A—General**

**§ 91.1 Applicability.**

(a) Except as provided in paragraph (b) of this section and § 91.703, this part prescribes rules governing the operation of aircraft (other than moored balloons, kites, unmanned rockets, and unmanned free balloons, which are governed by part 101 of this chapter, and ultralight vehicles operated in accordance with part 103 of this chapter) within the United States, including the waters within 3 nautical miles of the U.S. coast.

(b) Each person operating an aircraft in the airspace overlying the waters between 3 and 12 nautical miles from the coast of the United States shall comply with §§ 91.1 through 91.21; §§ 91.101 through 91.143; §§ 91.151 through 91.159; §§ 91.167 through 91.193; § 91.203; § 91.205; §§ 91.209 through 91.217; § 91.221; §§ 91.303 through 91.319; § 91.323; § 91.605; § 91.609; §§ 91.703 through 91.715; and § 91.903.

**§ 91.3 Responsibility and authority of the pilot in command.**

(a) The pilot in command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft.

(b) In an in-flight emergency requiring immediate action, the pilot in command may deviate from any rule of this part to the extent required to meet that emergency.

(c) Each pilot in command who deviates from a rule under paragraph (b) of this section shall, upon the request of the Administrator, send a written report of that deviation to the Administrator.

(Approved by the Office of Management and Budget under OMB control number 2120-0005).

**§ 91.5 Pilot in command of aircraft requiring more than one required pilot.**

No person may operate an aircraft that is type certificated for more than one required pilot flight crewmember unless the pilot in command meets the requirements of § 61.58 of this chapter.

**§ 91.7 Civil aircraft airworthiness.**

(a) No person may operate a civil aircraft unless it is in an airworthy condition.

(b) The pilot in command of a civil aircraft is responsible for determining whether that aircraft is in condition for safe flight. The pilot in command shall discontinue the flight when unairworthy mechanical, electrical, or structural conditions occur.

**§ 91.9 Civil aircraft flight manual, marking, and placard requirements.**

(a) Except as provided in paragraph (d) of this section, no person may operate a civil aircraft without complying with the operating limitations specified in the approved Airplane or Rotorcraft Flight Manual, markings, and placards, or as otherwise prescribed by the certificating authority of the country of registry.

(b) No person may operate a U.S.-registered civil aircraft—

(1) For which an Airplane or Rotorcraft Flight Manual is required by § 21.5 of this chapter unless there is available in the aircraft a current, approved Airplane or Rotorcraft Flight Manual or the manual provided for in § 121.141(b); and

(2) For which an Airplane or Rotorcraft Flight Manual is not required by § 21.5 of this chapter, unless there is available in the aircraft a current approved Airplane or Rotorcraft Flight Manual, approved manual material, markings, and placards, or any combination thereof.

(c) No person may operate a U.S.-registered civil aircraft unless that aircraft is identified in accordance with part 45 of this chapter.

(d) Any person taking off or landing a helicopter certificated under part 29 of this chapter at a heliport constructed over water may make such momentary flight as is necessary for takeoff or landing through the prohibited range of the limiting height-speed envelope established for the helicopter if that flight through the prohibited range takes place over water on which a safe ditching can be accomplished and if the helicopter is amphibious

No person may assault, threaten, intimidate, or interfere with a crewmember in the performance of the crewmember's duties aboard an aircraft being operated.

**§ 91.13 Careless or reckless operation.**

(a) *Aircraft operations for the purpose of air navigation.* No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.

(b) *Aircraft operations other than for the purpose of air navigation.* No person may operate an aircraft, other than for the purpose of air navigation, on any part of the surface of an airport used by aircraft for air commerce (including areas used by those aircraft for receiving or discharging persons or cargo), in a careless or reckless manner so as to endanger the life or property of another.

**§ 91.15 Dropping objects.**

No pilot in command of a civil aircraft may allow any object to be dropped from that aircraft in flight that creates a hazard to persons or property. However, this section does not prohibit the dropping of any object if reasonable precautions are taken to avoid injury or damage to persons or property.

**§ 91.17 Alcohol or drugs.**

(a) No person may act or attempt to act as a crewmember of a civil aircraft—

(1) Within 8 hours after the consumption of any alcoholic beverage;

(2) While under the influence of alcohol;

(3) While using any drug that affects the person's faculties in any way contrary to safety; or

(4) While having .04 percent by weight or more alcohol in the blood.

(b) Except in an emergency, no pilot of a civil aircraft may allow a person who appears to be intoxicated or who demonstrates by manner or physical indications that the individual is under the influence of drugs (except a medical patient under proper care) to be carried in that aircraft.

(c) A crewmember shall do the following:

(ii) The law enforcement officer is requesting submission to the test to investigate a suspected violation of State or local law governing the same or substantially similar conduct prohibited by paragraph (a)(1), (a)(2), or (a)(4) of this section.

(2) Whenever the Administrator has a reasonable basis to believe that a person may have violated paragraph (a)(1), (a)(2), or (a)(4) of this section, that person shall, upon request by the Administrator, furnish the Administrator, or authorize any clinic, hospital, doctor, or other person to release to the Administrator, the results of each test taken within 4 hours after acting or attempting to act as a crewmember that indicates percentage by weight of alcohol in the blood.

(d) Whenever the Administrator has a reasonable basis to believe that a person may have violated paragraph (a)(3) of this section, that person shall, upon request by the Administrator, furnish the Administrator, or authorize any clinic, hospital, doctor, or other person to release to the Administrator, the results of each test taken within 4 hours after acting or attempting to act as a crewmember that indicates the presence of any drugs in the body.

(e) Any test information obtained by the Administrator under paragraph (c) or (d) of this section may be evaluated in determining a person's qualifications for any airman certificate or possible violations of this chapter and may be used as evidence in any legal proceeding under section 602, 609, or 901 of the Federal Aviation Act of 1958.

**§ 91.19 Carriage of narcotic drugs, marijuana, and depressant or stimulant drugs or substances.**

(a) Except as provided in paragraph (b) of this section, no person may operate a civil aircraft within the United States with knowledge that narcotic drugs, marijuana, and depressant or stimulant drugs or substances as defined in Federal or State statutes are carried in the aircraft.

(b) Paragraph (a) of this section does not apply to any carriage of narcotic drugs, marijuana, and depressant or stimulant drugs or substances authorized by or under any Federal or State statute or by any Federal or State agency.

(1) Aircraft operated by a holder of an air carrier operating certificate or an operating certificate; or

(2) Any other aircraft while it is operated under IFR.

(b) Paragraph (a) of this section does not apply to—

(1) Portable voice recorders;

(2) Hearing aids;

(3) Heart pacemakers;

(4) Electric shavers; or

(5) Any other portable electronic device that the operator of the aircraft has determined will not cause interference with the navigation or communication system of the aircraft on which it is to be used.

(c) In the case of an aircraft operated by a holder of an air carrier operating certificate or an operating certificate, the determination required by paragraph (b)(5) of this section shall be made by that operator of the aircraft on which the particular device is to be used. In the case of other aircraft, the determination may be made by the pilot in command or other operator of the aircraft.

#### **§91.23 Truth-in-leasing clause requirement in leases and conditional sales contracts.**

(a) Except as provided in paragraph (b) of this section, the parties to a lease or contract of conditional sale involving a U.S.-registered large civil aircraft and entered into after January 2, 1973, shall execute a written lease or contract and include therein a written truth-in-leasing clause as a concluding paragraph in large print, immediately preceding the space for the signature of the parties, which contains the following with respect to each such aircraft:

(1) Identification of the Federal Aviation Regulations under which the aircraft has been maintained and inspected during the 12 months preceding the execution of the lease or contract of conditional sale, and certification by the parties thereto regarding the aircraft's status of compliance with applicable maintenance and inspection requirements in this part for the oper-

that each person understands that person's responsibilities for compliance with applicable Federal Aviation Regulations.

(3) A statement that an explanation of factors bearing on operational control and pertinent Federal Aviation Regulations can be obtained from the nearest FAA Flight Standards district office.

(b) The requirements of paragraph (a) of this section do not apply

(1) To a lease or contract of conditional sale when—

(i) The party to whom the aircraft is furnished is a foreign air carrier or certificate holder under part 121, 125, 127, 135, or 141 of this chapter, or

(ii) [The party furnishing the aircraft is a foreign air carrier or a person operating under part 121, 125, and 141 of this chapter, or a person operating under part 135 of this chapter having authority to engage in on-demand operations with large aircraft.]

(2) To a contract of conditional sale, when the aircraft involved has not been registered anywhere prior to the execution of the contract, except as a new aircraft under a dealer's aircraft registration certificate issued in accordance with § 47.61 of this chapter.

(c) No person may operate a large civil aircraft of U.S. registry that is subject to a lease or contract of conditional sale to which paragraph (a) of this section applies, unless—

(1) The lessee or conditional buyer, or the registered owner if the lessee is not a citizen of the United States, has mailed a copy of the lease or contract that complies with the requirements of paragraph (a) of this section, within 24 hours of its execution, to the Aircraft Registration Branch, Attn: Technical Section, P.O. Box 25724, Oklahoma City, OK 73125;

(2) A copy of the lease or contract that complies with the requirements of paragraph (a) of this section is carried in the aircraft. The copy of the lease or contract shall be made available for review upon request by the Administrator, and

(3) The lessee or conditional buyer, or the registered owner if the lessee is not a citizen of the United States, has notified by telephone

and inform the FAA of-

- (i) The location of the airport of departure;
- (ii) The departure time; and
- (iii) The registration number of the aircraft involved.

(d) The copy of the lease or contract furnished to the FAA under paragraph (c) of this section is commercial or financial information obtained from a person. It is, therefore, privileged and confidential and will not be made available by the FAA for public inspection or copying under 5 U.S.C. 552(b)(4) unless recorded with the FAA under part 49 of this chapter.

(e) For the purpose of this section, a lease means any agreement by a person to furnish an aircraft to another person for compensation or hire, whether with or without flight crewmembers, other than an agreement for the sale of an aircraft and a contract

(Amdt. 91-212, Eff. 8/18/90); [(Amdt. 91-253, Eff. 3/12/97)]

**§91.25 Aviation Safety Reporting Program:  
Prohibition against use of reports for  
enforcement purposes.**

The Administrator of the FAA will not use reports submitted to the National Aeronautics and Space Administration under the Aviation Safety Reporting Program (or information derived therefrom) in any enforcement action except information concerning accidents or criminal offenses which are wholly excluded from the Program.

**§§91.27 — 91.99 [Reserved]**

[(Amdt. 91-240, Corrected, Eff. 5/12/94)]



## Subpart B—Flight Rules

### General

#### § 91.101 Applicability.

This subpart prescribes flight rules governing the operation of aircraft within the United States and within 12 nautical miles from the coast of the United States.

#### § 91.103 Preflight action.

Each pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight. This information must include—

(a) For a flight under IFR or a flight not in the vicinity of an airport, weather reports and forecasts, fuel requirements, alternatives available if the planned flight cannot be completed, and any known traffic delays of which the pilot in command has been advised by ATC;

(b) For any flight, runway lengths at airports of intended use, and the following takeoff and landing distance information:

(1) For civil aircraft for which an approved Airplane or Rotorcraft Flight Manual containing takeoff and landing distance data is required, the takeoff and landing distance data contained therein; and

(2) For civil aircraft other than those specified in paragraph (b)(1) of this section, other reliable information appropriate to the aircraft, relating to aircraft performance under expected values of airport elevation and runway slope, aircraft gross weight, and wind and temperature.

#### § 91.105 Flight crewmembers at stations.

(a) During takeoff and landing, and while en route, each required flight crewmember shall—

(1) Be at the crewmember station unless the absence is necessary to perform duties in connection with the operation of the aircraft or in connection with physiological needs; and

(2) Keep the safety belt fastened while at the crewmember station.

(b) [Each required flight crewmember of a U.S.-registered civil aircraft shall, during takeoff and

landing, keep his or her shoulder harness fastened while at his or her assigned duty station. This paragraph does not apply if—]

(1) The seat at the crewmember's station is not equipped with a shoulder harness; or

(2) The crewmember would be unable to perform required duties with the shoulder harness fastened.

[(Amdt. 91-231, Eff. 10/15/92)]

#### § 91.107 Use of safety belts, shoulder harnesses, and child restraint systems.

(a) Unless otherwise authorized by the Administrator—

(1) No pilot may take off a U.S.-registered civil aircraft (except a free balloon that incorporates a basket or gondola, or an airship type certificated before November 2, 1987) unless the pilot in command of that aircraft ensures that each person on board is briefed on how to fasten and unfasten that person's safety belt and, if installed, shoulder harness.

(2) No pilot may cause to be moved on the surface, take off, or land a U.S.-registered civil aircraft (except a free balloon that incorporates a basket or gondola, or an airship type certificated before November 2, 1987) unless the pilot in command of that aircraft ensures that each person on board has been notified to fasten his or her safety belt and, if installed, his or her shoulder harness.

(3) Except as provided in this paragraph, each person on board a U.S.-registered civil aircraft (except a free balloon that incorporates a basket or gondola or an airship type certificated before November 2, 1987) must occupy an approved seat or berth with a safety belt and, if installed, shoulder harness, properly secured about him or her during movement on the surface, takeoff, and landing. For seaplane and float equipped rotorcraft operations during movement on the surface, the person pushing off the seaplane or rotorcraft from the dock and the person mooring the seaplane or rotorcraft at the dock are excepted from

person being held has not reached his or her second birthday and does not occupy or use any restraining device;]

(ii) Use the floor of the aircraft as a seat, provided that the person is on board for the purpose of engaging in sport parachuting; or

(iii) Notwithstanding any other requirement of this chapter, occupy an approved child restraint system furnished by the operator or one of the persons described in paragraph (a)(3)(iii)(A) of this section provided that:

(A) The child is accompanied by a parent, guardian, or attendant designated by the child's parent or guardian to attend to the safety of the child during the flight;

(B) [Except as provided in paragraph (a)(3)(iii)(B)(4) of this section, the approved child restraint system bears one or more labels as follows:]

(1) Seats manufactured to U.S. standards between January 1, 1981, and February 25, 1985, must bear the label: "This child restraint system conforms to all applicable Federal motor vehicle safety standards."

(2) Seats manufactured to U.S. standards on or after February 26, 1985, must bear two labels:

(i) "This child restraint system conforms to all applicable Federal motor vehicle safety standards"; and

(ii) "THIS RESTRAINT IS CERTIFIED FOR USE IN MOTOR VEHICLES AND AIRCRAFT" in red lettering;

(3) Seats that do not qualify under paragraphs (a)(3)(iii)(B)(1) and (a)(3)(iii)(B)(2) of this section must bear either a label showing approval of a foreign government or a label showing that the seat was manufactured under the standards of the United Nations;

[(4) Notwithstanding any other provision of this section, booster-type child restraint systems (as defined in Federal Motor Vehicle Safety Standard No. 213 (49 CFR § 571.213)), vest- and harness-type child restraint systems, and lap held child restraints are not approved for use in aircraft; and]

(2) The child must be properly secured in the restraint system and must not exceed the specified weight limit for the restraint system; and

(3) The restraint system must bear the appropriate label(s).

(b) Unless otherwise stated, this section does not apply to operations conducted under part 121, 125, or 135 of this chapter. Paragraph (a)(3) of this section does not apply to persons subject to § 91.105.

(Amdt. 91-231, Eff. 10/15/92); [(Amdt. 91-250, Eff. 9/3/96)]

#### **§ 91.109 Flight instruction; Simulated instrument flight and certain flight tests.**

(a) No person may operate a civil aircraft (except a manned free balloon) that is being used for flight instruction unless that aircraft has fully functioning dual controls. However, instrument flight instruction may be given in a single-engine airplane equipped with a single, functioning throwover control wheel in place of fixed, dual controls of the elevator and ailerons when—

(1) The instructor has determined that the flight can be conducted safely; and

(2) The person manipulating the controls has at least a private pilot certificate with appropriate category and class ratings.

(b) No person may operate a civil aircraft in simulated instrument flight unless—

(1) The other control seat is occupied by a safety pilot who possesses at least a private pilot certificate with category and class ratings appropriate to the aircraft being flown.

(2) The safety pilot has adequate vision forward and to each side of the aircraft, or a competent observer in the aircraft adequately supplements the vision of the safety pilot; and

(3) Except in the case of lighter-than-air aircraft, that aircraft is equipped with fully functioning dual controls. However, simulated instrument flight may be conducted in a single-engine airplane, equipped with a single, functioning, throwover control wheel, in place of fixed, dual controls of the elevator and ailerons, when—

(i) The safety pilot has determined that the flight can be conducted safely; and

certificate, or for a part 121 proficiency flight test, unless the pilot seated at the controls, other than the pilot being checked, is fully qualified to act as pilot in command of the aircraft.

#### **§91.111 Operating near other aircraft.**

(a) No person may operate an aircraft so close to another aircraft as to create a collision hazard.

(b) No person may operate an aircraft in formation flight except by arrangement with the pilot in command of each aircraft in the formation.

(c) No person may operate an aircraft, carrying passengers for hire, in formation flight.

#### **§91.113 Right-of-way rules: Except water operations.**

(a) *Inapplicability.* This section does not apply to the operation of an aircraft on water.

(b) *General.* When weather conditions permit, regardless of whether an operation is conducted under instrument flight rules or visual flight rules, vigilance shall be maintained by each person operating an aircraft so as to see and avoid other aircraft. When a rule of this section gives another aircraft the right-of-way, the pilot shall give way to that aircraft and may not pass over, under, or ahead of it unless well clear.

(c) *In distress.* An aircraft in distress has the right-of-way over all other air traffic.

(d) *Converging.* When aircraft of the same category are converging at approximately the same altitude (except head-on, or nearly so), the aircraft to the other's right has the right-of-way. If the aircraft are of different categories—

(1) A balloon has the right-of-way over any other category of aircraft;

(2) A glider has the right-of-way over an airship, airplane, or rotorcraft; and

(3) An airship has the right-of-way over an airplane or rotorcraft.

However, an aircraft towing or refueling other aircraft has the right-of-way over all other engine-driven aircraft.

(e) *Approaching head-on.* When aircraft are approaching each other head-on, or nearly so, each pilot of each aircraft shall alter course to the right.

other aircraft in flight or operating on the surface, except that they shall not take advantage of this rule to force an aircraft off the runway surface which has already landed and is attempting to make way for an aircraft on final approach. When two or more aircraft are approaching an airport for the purpose of landing, the aircraft at the lower altitude has the right-of-way, but it shall not take advantage of this rule to cut in front of another which is on final approach to land or to overtake that aircraft.

#### **§91.115 Right-of-way rules: Water operations.**

(a) *General.* Each person operating an aircraft on the water shall, insofar as possible, keep clear of all vessels and avoid impeding their navigation, and shall give way to any vessel or other aircraft that is given the right-of-way by any rule of this section.

(b) *Crossing.* When aircraft, or an aircraft and a vessel, are on crossing courses, the aircraft or vessel to the other's right has the right-of-way.

(c) *Approaching head-on.* When aircraft, or an aircraft and a vessel, are approaching head-on, or nearly so, each shall alter its course to the right to keep well clear.

(d) *Overtaking.* Each aircraft or vessel that is being overtaken has the right-of-way, and the one overtaking shall alter course to keep well clear.

(e) *Special circumstances.* When aircraft, or an aircraft and a vessel, approach so as to involve risk of collision, each aircraft or vessel shall proceed with careful regard to existing circumstances, including the limitations of the respective craft.

#### **§91.117 Aircraft speed.**

[(a) Unless otherwise authorized by the Administrator, no person may operate an aircraft below 10,000 feet MSL at an indicated airspeed of more than 250 knots (288 m.p.h.).]

[(b) Unless otherwise authorized or required by ATC, no person may operate an aircraft at or below 2,500 feet above the surface within 4 nautical miles of the primary airport of a Class C or Class D airspace area at an indicated airspeed of more than 200 knots (230 mph.). This paragraph (b) does not apply to any operations within a Class B airspace

ignated through such a Class D airspace area, at an indicated airspeed of more than 200 knots (230 mph).

(d) If the minimum safe airspeed for any particular operation is greater than the maximum speed prescribed in this section, the aircraft may be operated at that minimum speed.

(Amdt. 91-219, Eff. 8/24/90); (Amdt. 91-227, Eff. 9/16/93); (Amdt. 91-227, Corrected, Eff. 9/16/93); [(Amdt. 91-233, Eff. 9/16/93)]

#### § 91.119 Minimum safe altitudes: General.

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

(a) *Anywhere.* An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.

(b) *Over congested areas.* Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.

(c) *Over other than congested areas.* An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.

(d) *Helicopters.* Helicopters may be operated at less than the minimums prescribed in paragraph (b) or (c) of this section if the operation is conducted without hazard to persons or property on the surface. In addition, each person operating a helicopter shall comply with any routes or altitudes specifically prescribed for helicopters by the Administrator.

#### § 91.121 Altimeter settings.

(a) Each person operating an aircraft shall maintain the cruising altitude or flight level of that aircraft, as the case may be, by reference to an altimeter that is set, when operating—

(1) Below 18,000 feet MSL, to—

(i) The current reported altimeter setting of a station along the route and within 100 nautical miles of the aircraft;

(ii) If there is no station within the area prescribed in paragraph (a)(1)(i) of this section,

(2) At or above 18,000 feet MSL, to 29.92" Hg.

(b) The lowest usable flight level is determined by the atmospheric pressure in the area of operation as shown in the following table:

Current altimeter setting	Lowest usable flight level
29.92" (or higher) .....	180
29.91" through 29.42" .....	185
29.41" through 28.92" .....	190
28.91" through 28.42" .....	195
28.41" through 27.92" .....	200
27.91" through 27.42" .....	205
27.41" through 26.92" .....	210

(c) To convert minimum altitude prescribed under § 91.119 and § 91.177 to the minimum flight level, the pilot shall take the flight level equivalent of the minimum altitude in feet and add the appropriate number of feet specified below, according to the current reported altimeter setting:

Current altimeter setting	Adjustment factor
29.92" (or higher) .....	None
29.91" through 29.42" .....	500
29.41" through 28.92" .....	1,000
28.91" through 28.42" .....	1,500
28.41" through 27.92" .....	2,000
27.91" through 27.42" .....	2,500
27.41" through 26.92" .....	3,000

#### § 91.123 Compliance with ATC clearances and instructions.

(a) [When an ATC clearance has been obtained, no pilot in command may deviate from that clearance unless an amended clearance is obtained, an emergency exists, or the deviation is in response to a traffic alert and collision avoidance system resolution advisory. However, except in Class A airspace, a pilot may cancel an IFR flight plan if the operation is being conducted in VFR weather conditions. When a pilot is uncertain of an ATC clearance, that pilot shall immediately request clarification from ATC.]

(b) Except in an emergency, no person may operate an aircraft contrary to an ATC instruction in an area in which air traffic control is exercised.

deviating from a rule of this subpart) is given priority by ATC in an emergency, shall submit a detailed report of that emergency within 48 hours to the manager of that ATC facility, if requested by ATC.

(e) Unless otherwise authorized by ATC, no person operating an aircraft may operate that aircraft according to any clearance or instruction that has been issued to the pilot of another aircraft for radar air traffic control purposes.

(Approved by the Office of Management and Budget under OMB control number 2120-0005). (Amdt. 91-227, Eff. 9/16/93); [(Amdt. 91-244, Eff. 10/30/95)]

#### §91.125 ATC light signals.

ATC light signals have the meaning shown in the following table:

Color and type of signal	Meaning with respect to aircraft on the surface	Meaning with respect to aircraft in flight
Steady green	Cleared for take-off	Cleared to land
Flashing green	Cleared to taxi	Return for landing (to be followed by steady green at proper time)
Steady red	Stop	Give way to other aircraft and continue circling
Flashing red	Taxi clear of runway in use	Airport unsafe—do not land
Flashing white	Return to starting point on airport	Not applicable
Alternating red and green	Exercise extreme caution	Exercise extreme caution.

#### §91.126 Operating on or in the vicinity of an airport in Class G airspace.

(a) *General.* Unless otherwise authorized or required, each person operating an aircraft on or in the vicinity of an airport in a Class G airspace area must comply with the requirements of this section.

(b) *Direction of turns.* [When approaching to land at an airport without an operating control tower in a Class G airspace—]

(2) Each pilot of a helicopter must avoid the flow of fixed-wing aircraft.

(c) *Flap settings.* Except when necessary for training or certification, the pilot in command of a civil turbojet-powered aircraft must use, as a final flap setting, the minimum certificated landing flap setting set forth in the approved performance information in the Airplane Flight Manual for the applicable conditions. However, each pilot in command has the final authority and responsibility for the safe operation of the pilot's airplane, and may use a different flap setting for that airplane if the pilot determines that it is necessary in the interest of safety.

[(d) *Communications with control towers.* Unless otherwise authorized or required by ATC, no person may operate an aircraft to, from, through, or on an airport having an operational control tower unless two-way radio communications are maintained between that aircraft and the control tower. Communications must be established prior to 4 nautical miles from the airport, up to and including 2,500 feet AGL. However, if the aircraft radio fails in flight, the pilot in command may operate that aircraft and land if weather conditions are at or above basic VFR weather minimums, visual contact with the tower is maintained, and a clearance to land is received. If the aircraft radio fails while in flight under IFR, the pilot must comply with §91.185.]

(Amdt. 91-227, Eff. 9/16/93); [(Amdt. 91-239, Eff. 3/11/94)]

#### §91.127 Operating on or in the vicinity of an airport in Class E airspace.

(a) Unless otherwise required by part 93 of this chapter or unless otherwise authorized or required by the ATC facility having jurisdiction over the Class E airspace area, each person operating an aircraft on or in the vicinity of an airport in a Class E airspace area must comply with the requirements of §91.126.

(b) *Departures.* Each pilot of an aircraft must comply with any traffic patterns established for that airport in part 93 of this chapter.

[(c) *Communications with control towers.* Unless otherwise authorized or required by ATC, no person may operate an aircraft to, from, through, or on

in flight, the pilot in command may operate that aircraft and land if weather conditions are at or above basic VFR weather minimums, visual contact with the tower is maintained, and a clearance to land is received. If the aircraft radio fails while in flight under IFR, the pilot must comply with § 91.185.】

(Amdt. 91-227, Eff. 9/16/93); [(Amdt. 91-239, Eff. 3/11/94)]

#### **§ 91.129 Operations in Class D airspace.**

(a) *General.* Unless otherwise authorized or required by the ATC facility having jurisdiction over the Class D airspace area, each person operating an aircraft in Class D airspace must comply with the applicable provisions of this section. In addition, each person must comply with §§ 91.126 and 91.127. For the purpose of this section, the primary airport is the airport for which the Class D airspace area is designated. A satellite airport is any other airport within the Class D airspace area.

(b) *Deviations.* An operator may deviate from any provision of this section under the provisions of an ATC authorization issued by the ATC facility having jurisdiction over the airspace concerned. ATC may authorize a deviation on a continuing basis or for an individual flight, as appropriate.

(c) *Communications.* Each person operating an aircraft in Class D airspace must meet the following two-way radio communications requirements:

(1) *Arrival or through flight.* Each person must establish two-way radio communications with the ATC facility (including foreign ATC in the case of foreign airspace designated in the United States) providing air traffic services prior to entering that airspace and thereafter maintain those communications while within that airspace.

(2) *Departing flight.* Each person—

(i) From the primary airport or satellite airport with an operating control tower must establish and maintain two-way radio communications with the control tower, and thereafter as instructed by ATC while operating in the Class D airspace area; or

(ii) From a satellite airport without an operating control tower, must establish and maintain two-way radio communications with

ATC facility having jurisdiction over that area.

(1) If the aircraft radio fails in flight under IFR, the pilot must comply with § 91.185 of the part.

(2) If the aircraft radio fails in flight under VFR, the pilot in command may operate that aircraft and land if—

(i) Weather conditions are at or above basic VFR weather minimums;

(ii) Visual contact with the tower is maintained; and

(iii) A clearance to land is received.

(e) *【Minimum Altitudes.* When operating to an airport in class D airspace, each pilot of—

(1) *【A large or turbine-powered airplane shall, unless otherwise required by the applicable distance from cloud criteria, enter the traffic pattern at an altitude of at least 1,500 feet above the elevation of the airport and maintain at least 1,500 feet until further descent is required for a safe landing;*

(2) *【A large or turbine-powered airplane approaching to land on a runway served by an instrument landing system (ILS), if the airplane is ILS equipped, shall fly that airplane at an altitude at or above the glide slope between the outer marker (or point of interception of glide slope, if compliance with the applicable distance from cloud criteria requires interception closer in) and the middle marker; and*

(3) *【An airplane approaching to land on a runway served by a visual approach slope indicator shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.】*

Paragraphs (e)(2) and (e)(3) of this section do not prohibit normal bracketing maneuvers above or below the glide slope that are conducted for the purpose of remaining on the glide slope.

(f) *Approaches.* Except when conducting a circling approach under part 97 of this chapter or unless otherwise required by ATC, each pilot must—

(1) Circle the airport to the left, if operating an airplane; or

(2) Avoid the flow of fixed-wing aircraft, if operating a helicopter.

FAA.

(2) Unless otherwise required by the prescribed departure procedure for that airport or the applicable distance from clouds criteria, each pilot of a turbine-powered airplane and each pilot of a large airplane must climb to an altitude of 1,500 feet above the surface as rapidly as practicable.

(h) *Noise abatement.* Where a formal runway use program has been established by the FAA, each pilot of a large or turbine-powered airplane assigned a noise abatement runway by ATC must use that runway. However, consistent with the final authority of the pilot in command concerning the safe operation of the aircraft as prescribed in § 91.3(a), ATC may assign a different runway if requested by the pilot in the interest of safety.

(i) *Takeoff, landing, taxi clearance.* No person may, at any airport with an operating control tower, operate an aircraft on a runway or taxiway, or take off or land an aircraft, unless an appropriate clearance is received from ATC. A clearance to "taxi to" the takeoff runway assigned to the aircraft is not a clearance to cross that assigned takeoff runway, or to taxi on that runway at any point, but is a clearance to cross other runways that intersect the taxi route to that assigned takeoff runway. A clearance to "taxi to" any point other than an assigned takeoff runway is clearance to cross all runways that intersect the taxi route to that point. (Amdt. 91-227, Eff. 9/16/93); [(Amdt. 91-234, Eff. 9/16/93)]

#### **§91.130 Operations in Class C airspace.**

(a) *General.* Unless otherwise authorized by ATC, each aircraft operation in Class C airspace must be conducted in compliance with this section and § 91.129. For the purpose of this section, the primary airport is the airport for which the Class C airspace area is designated. A satellite airport is any other airport within the Class C airspace area.

(b) *Traffic patterns.* No person may take off or land an aircraft at a satellite airport within a Class C airspace area except in compliance with FAA arrival and departure traffic patterns.

(c) *Communications.* Each person operating an aircraft in Class C airspace must meet the following two-way radio communications requirements:

entering that airspace and thereafter maintain those communications while within that airspace.

(2) Departing flight. Each person—

(i) From the primary airport or satellite airport with an operating control tower must establish and maintain two-way radio communications with the control tower, and thereafter as instructed by ATC while operating in the Class C airspace area; or

(ii) From a satellite airport without an operating control tower, must establish and maintain two-way radio communications with the ATC facility having jurisdiction over the Class C airspace area as soon as practicable after departing.

(d) *Equipment requirements.* Unless otherwise authorized by the ATC having jurisdiction over the Class C airspace area, no person may operate an aircraft within a Class C airspace area designated for an airport unless that aircraft is equipped with the applicable equipment specified in § 91.215.

[(e) *Deviations.* An operator may deviate from any provision of this section under the provisions of an ATC authorization issued by the ATC facility having jurisdiction over the airspace concerned. ATC may authorize a deviation on a continuing basis or for an individual flight, as appropriate.] (Amdt. 91-215, Eff. 8/18/90); (Amdt. 91-227, Eff. 9/16/93); (Amdt. 91-232, Eff. 9/16/93); [(Amdt. 91-239, Eff. 3/11/94)]

#### **§91.131 Operations in Class B airspace.**

[(a) *Operating rules.* No person may operate an aircraft within a Class B airspace area except in compliance with § 91.129 and the following rules:

[(1) The operator must receive an ATC clearance from the ATC facility having jurisdiction for that area before operating an aircraft in that area.

[(2) Unless otherwise authorized by ATC, each person operating a large turbine engine-powered airplane to or from a primary airport for which a Class B airspace area is designated must operate at or above the designated floors of the Class B airspace area while within the lateral limits of that area.

[(3) Any person conducting pilot training operations at an airport within a Class B airspace

area or operate a civil aircraft within a Class B airspace area unless—

[(i) The pilot in command holds at least a private pilot certificate; or

[(ii) The aircraft is operated by a student pilot or recreational pilot who seeks private pilot certification and has met the requirements of § 61.95 of this chapter.

[(2) Notwithstanding the provisions of paragraph (b)(1)(ii) of this section, no person may take off or land a civil aircraft at those airports listed in section 4 of appendix D of this part unless the pilot in command holds at least a private pilot certificate.

[(c) *Communications and navigation equipment requirements.* Unless otherwise authorized by ATC, no person may operate an aircraft within a Class B airspace area unless that aircraft is equipped with—

[(1) For IFR operation. An operable VOR or TACAN receiver; and

[(2) For all operations. An operable two-way radio capable of communications with ATC on appropriate frequencies for that Class B airspace area.

[(d) *Transponder requirements.* No person may operate an aircraft in a Class B airspace area unless the aircraft is equipped with the applicable operating transponder and automatic altitude reporting equipment specified in paragraph (a) of § 91.215, except as provided in paragraph (d) of that section.] (Amdt. 91-214, Eff. 8/18/90); (Amdt. 91-216, Eff. 8/18/90); [(Amdt. 91-227, Eff. 9/16/93)]

### **§91.133 Restricted and prohibited areas.**

(a) No person may operate an aircraft within a restricted area (designated in part 73) contrary to the restrictions imposed, or within a prohibited area, unless that person has the permission of the using or controlling agency, as appropriate.

(b) Each person conducting, within a restricted area, an aircraft operation (approved by the using agency) that creates the same hazards as the operations for which the restricted area was designated may deviate from the rules of this subpart that are not compatible with the operation of the aircraft.

the following:

[(a) *Clearance.* Operations may be conducted only under an ATC clearance received prior to entering the airspace.

[(b) *Communications.* Unless otherwise authorized by ATC, each aircraft operating in Class A airspace must be equipped with a two-way radio capable of communicating with ATC on a frequency assigned by ATC. Each pilot must maintain two-way radio communications with ATC while operating in Class A airspace.

[(c) *Transponder requirement.* Unless otherwise authorized by ATC, no person may operate an aircraft within Class A airspace unless that aircraft is equipped with the applicable equipment specified in § 91.215.

[(d) *ATC authorizations.* An operator may deviate from any provision of this section under the provisions of an ATC authorization issued by the ATC facility having jurisdiction of the airspace concerned. In the case of an inoperative transponder, ATC may immediately approve an operation within a Class A airspace area allowing flight to continue, if desired, to the airport of ultimate destination, including any intermediate stops, or to proceed to a place where suitable repairs can be made, or both. Requests for deviation from any provision of this section must be submitted in writing, at least 4 days before the proposed operation. ATC may authorize a deviation on a continuing basis or for an individual flight.]

[(Amdt. 91-227, Eff. 9/16/93)]

### **§91.137 Temporary flight restrictions.**

(a) The Administrator will issue a Notice to Airmen (NOTAM) designating an area within which temporary flight restrictions apply and specifying the hazard or condition requiring their imposition, whenever he determines it is necessary in order to—

(1) Protect persons and property on the surface or in the air from a hazard associated with an incident on the surface;

(2) Provide a safe environment for the operation of disaster relief aircraft; or

(3) Prevent an unsafe congestion of sightseeing and other aircraft above an incident or event



(b) When a NOTAM has been issued under paragraph (a)(1) of this section, no person may operate an aircraft within the designated area unless that aircraft is participating in the hazard relief activities and is being operated under the direction of the official in charge of on scene emergency response activities.

(c) When a NOTAM has been issued under paragraph (a)(2) of this section, no person may operate an aircraft within the designated area unless at least one of the following conditions are met:

(1) The aircraft is participating in hazard relief activities and is being operated under the direction of the official in charge of on scene emergency response activities.

(2) The aircraft is carrying law enforcement officials.

(3) The aircraft is operating under the ATC approved IFR flight plan.

(4) The operation is conducted directly to or from an airport within the area, or is necessitated by the impracticability of VFR flight above or around the area due to weather, or terrain; notification is given to the Flight Service Station (FSS) or ATC facility specified in the NOTAM to receive advisories concerning disaster relief aircraft operations; and the operation does not hamper or endanger relief activities and is not conducted for the purpose of observing the disaster.

(5) The aircraft is carrying properly accredited news representatives, and, prior to entering the area, a flight plan is filed with the appropriate FAA or ATC facility specified in the Notice to Airmen and the operation is conducted above the altitude used by the disaster relief aircraft, unless otherwise authorized by the official in charge of on scene emergency response activities.

(d) When a NOTAM has been issued under paragraph (a)(3) of this section, no person may operate an aircraft within the designated area unless at least one of the following conditions is met:

(1) The operation is conducted directly to or from an airport within the area, or is necessitated by the impracticability of VFR flight above or around the area due to weather or terrain, and the operation is not conducted for the purpose of observing the incident or event.

news representatives and, prior to entering that area, a flight plan is filed with the appropriate FSS or ATC facility specified in the NOTAM.

(e) Flight plans filed and notifications made with an FSS or ATC facility under this section shall include the following information:

(1) Aircraft identification, type and color.

(2) Radio communications frequencies to be used.

(3) Proposed times of entry of, and exit from, the designated area.

(4) Name of news media or organization and purpose of flight.

(5) Any other information requested by ATC.

#### **[§91.138 Temporary flight restrictions in national disaster areas in the State of Hawaii.**

[(a) When the Administrator has determined, pursuant to a request and justification provided by the Governor of the State of Hawaii, or the Governor's designee, that an inhabited area within a declared national disaster area in the State of Hawaii is in need of protection for humanitarian reasons, the Administrator will issue a Notice to Airmen (NOTAM) designating an area within which temporary flight restrictions apply. The Administrator will designate the extent and duration of the temporary flight restrictions necessary to provide for the protection of persons and property on the surface.

[(b) When a NOTAM has been issued in accordance with this section, no person may operate an aircraft within the designated airspace unless:

[(1) That person has obtained authorization from the official in charge of associated emergency or disaster relief response activities, and is operating the aircraft under the conditions of that authorization;

[(2) The aircraft is carrying law enforcement officials;

[(3) The aircraft is carrying persons involved in an emergency or a legitimate scientific purpose;

[(4) The aircraft is carrying properly accredited newsmen, and that prior to entering the area, a flight plan is filed with the appropriate FAA or ATC facility specified in the NOTAM and the operation is conducted in compliance

[(c) A NOTAM issued under this section is effective for 90 days or until the national disaster designation is terminated, whichever comes first, unless terminated by notice or extended by the Administrator at the request of the Governor of the State of Hawaii or the Governor's designee.] [(Amdt. 91-222, Eff. 5/20/91)]

#### **§91.139 Emergency air traffic rules.**

(a) This section prescribes a process for utilizing Notices to Airmen (NOTAMs) to advise of the issuance and operations under emergency air traffic rules and regulations and designates the official who is authorized to issue NOTAMs on behalf of the Administrator in certain matters under this section.

(b) Whenever the Administrator determines that an emergency condition exists, or will exist, relating to the FAA's ability to operate the air traffic control system and during which normal flight operations under this chapter cannot be conducted consistent with the required levels of safety and efficiency—

(1) The Administrator issues an immediately effective air traffic rule or regulation in response to that emergency condition; and

(2) The Administrator or the Associate Administrator for Air Traffic may utilize the NOTAM system to provide notification of the issuance of the rule or regulation.

Those NOTAMs communicate information concerning the rules and regulations that govern flight operations, the use of navigation facilities, and designation of that airspace in which the rules and regulations apply.

(c) When a NOTAM has been issued under this section, no person may operate an aircraft, or other device governed by the regulation concerned, within the designated airspace except in accordance with the authorizations, terms, and conditions prescribed in the regulation covered by the NOTAM.

by the President, the Vice President, or other public figures contrary to the restrictions established by the Administrator and published in a Notice to Airmen (NOTAM).

#### **§91.143 Flight limitation in the proximity of space flight operations.**

No person may operate any aircraft of U.S. registry, or pilot any aircraft under the authority of an airman certificate issued by the Federal Aviation Administration within areas designated in a Notice to Airmen (NOTAM) for space flight operations except when authorized by ATC, or operated under the control of the Department of Defense Manager for Space Transportation System Contingency Support Operations.

#### **[§91.144 Temporary restriction on flight operations during abnormally high barometric pressure conditions.**

(a) *Special flight restrictions.* When any information indicates that barometric pressure on the route of flight currently exceeds or will exceed 31 inches of mercury, no person may operate an aircraft or initiate a flight contrary to the requirements established by the Administrator and published in a Notice to Airmen issued under this section.

(b) *Waivers.* The Administrator is authorized to waive any restriction issued under paragraph (a) of this section to permit emergency supply, transport, or medical services to be delivered to isolated communities, where the operation can be conducted with an acceptable level of safety.】

[(Amdt. 91-240, Eff. 5/12/94)]

#### **§§91.145 — 91.149 [Reserved]**

## **Subpart B—Flight Rules**

### **Visual Flight Rules**

#### **§91.151 Fuel requirements for flight in VFR conditions.**

(a) No person may begin a flight in an airplane under VFR conditions unless (considering wind and

forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed—

(1) During the day, to fly after that for at least 30 minutes; or

assuming normal cruising speed, to fly after that for at least 20 minutes.

**§91.153 VFR flight plan: Information required.**

(a) *Information required.* Unless otherwise authorized by ATC, each person filing a VFR flight plan shall include in it the following information:

- (1) The aircraft identification number and, if necessary, its radio call sign.
- (2) The type of the aircraft or, in the case of a formation flight, the type of each aircraft and the number of aircraft in the formation.
- (3) The full name and address of the pilot in command or, in the case of a formation flight, the formation commander.
- (4) The point and proposed time of departure.
- (5) The proposed route, cruising altitude (or flight level), and true airspeed at that altitude.

available to the FAA.

(9) Any other information the pilot in command or ATC believes is necessary for ATC purposes.

(b) *Cancellation.* When a flight plan has been activated, the pilot in command, upon canceling or completing the flight under the flight plan, shall notify an FAA Flight Service Station or ATC facility.

**§91.155 Basic VFR weather minimums.**

(a) Except as provided in paragraph (b) of this section and §91.157, no person may operate an aircraft under VFR when the flight visibility is less, or at a distance from clouds that is less, than that prescribed for the corresponding altitude and class of airspace in the following table:

Airspace	Flight Visibility	Distance from clouds
Class A	Not Applicable	Not Applicable.
Class B	3 statute miles	Clear of Clouds.
Class C	3 statute miles	500 feet below. 1,000 feet above. 2,000 feet horizontal.
Class D	3 statute miles	500 feet below. 1,000 feet above. 2,000 feet horizontal.
Class E		
Less than 10,000 feet MSL	3 statute miles	500 feet below. 1,000 feet above. 2,000 feet horizontal.
At or above 10,000 feet MSL	5 statute miles	1,000 feet below. 1,000 feet above. 1 statute mile horizontal.
Class G:		
1,200 feet or less above the surface (regardless of MSL altitude)		
Day, except as provided in §91.155(b)	1 statute mile	Clear of clouds.
Night, except as provided in §91.155(b)	3 statute miles	500 feet below. 1,000 feet above. 2,000 feet horizontal.

MSL		
Day	1 statute mile	500 feet below. 1,000 feet above. 2,000 feet horizontal.
Night	3 statute miles	500 feet below. 1,000 feet above. 2,000 feet horizontal.
More than 1,200 feet above the surface and at or above 10,000 feet MSL	5 statute miles	1,000 feet below. 1,000 feet above. 1 statute mile horizontal.

(b) *Class G Airspace.* Notwithstanding the provisions of paragraph (a) of this section, the following operations may be conducted in Class G airspace below 1,200 feet above the surface:

(1) Helicopter. A helicopter may be operated clear of clouds if operated at a speed that allows the pilot adequate opportunity to see any air traffic or obstruction in time to avoid a collision.

(2) Airplane. When the visibility is less than 3 statute miles but not less than 1 statute mile during night hours, an airplane may be operated clear of clouds if operated in an airport traffic pattern within one-half mile of the runway.

(c) [Except as provided in §91.157, no person may operate an aircraft beneath the ceiling under VFR within the lateral boundaries of controlled airspace designated to the surface for an airport when the ceiling is less than 1,000 feet.]

(d) Except as provided in §91.157 of this part, no person may take off or land an aircraft, or enter the traffic pattern of an airport, under VFR, within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport—

(1) Unless ground visibility at that airport is at least 3 statute miles; or

(2) If ground visibility is not reported at that airport, unless flight visibility during landing or takeoff, or while operating in the traffic pattern is at least 3 statute miles.

(e) For the purpose of this section, an aircraft operating at the base altitude of a Class E airspace

area is considered to be within the airspace directly below that area.

(Amdt. 91-213, Eff. 8/18/90); (Amdt. 91-224, Eff. 9/23/91); (Amdt. 91-227, Eff. 9/16/93); [(Amdt. 91-235, Eff. 10/5/93)]

#### §91.157 Special VFR weather minimums.

(a) Except as provided in appendix D, section 3, of this part, special VFR operations may be conducted under the weather minimums and requirements of this section, instead of those contained in §91.155, below 10,000 feet MSL within the airspace contained by the upward extension of the lateral boundaries of the controlled airspace designated to the surface for an airport.

(b) Special VFR operations may only be conducted—

(1) With an ATC clearance;

(2) Clear of clouds;

(3) Except for helicopters, when flight visibility is at least 1 statute mile; and

(4) Except for helicopters, between sunrise and sunset (or in Alaska, when the sun is 6° or more [below] the horizon) unless—

(i) The person being granted the ATC clearance meets the applicable requirements for instrument flight under part 61 of this chapter; and

(ii) The aircraft is equipped as required in §91.205(d).

(c) No person may take off or land an aircraft (other than a helicopter) under special VFR—

(1) Unless ground visibility is at least 1 statute mile; or

§91.159 VFR cruising altitude or flight level.  
Except while holding in a holding pattern of 2 minutes or less, or while turning, each person operating an aircraft under VFR in level cruising flight more than 3,000 feet above the surface shall maintain the appropriate altitude or flight level prescribed below, unless otherwise authorized by ATC:  
(a) When operating below 18,000 feet MSL and—

(1) On a magnetic course of zero degrees through 179 degrees, any odd thousand foot MSL altitude +500 feet (such as 3,500, 5,500, or 7,500); or

(2) On a magnetic course of 180 degrees through 359 degrees, any even thousand foot MSL altitude +500 feet (such as 4,500, 6,500, or 8,500).

(2) On a magnetic course of 180 degrees through 359 degrees, any even flight level +500 feet (such as 185, 205, or 225).

(c) When operating above flight level 290 and—

(1) On a magnetic course of zero degrees through 179 degrees, any flight level, at 4,000-foot intervals, beginning at and including flight level 300 (such as flight level 300, 340, or 380); or

(2) On a magnetic course of 180 degrees through 359 degrees, any flight level, at 4,000-foot intervals, beginning at and including flight level 320 (such as flight level 320, 360, or 400).

§§91.161 — 91.165 [Reserved]

## Subpart B—Flight Rules

### Instrument Flight Rules

#### §91.167 Fuel requirements for flight in IFR conditions.

(a) Except as provided in paragraph (b) of this section, no person may operate a civil aircraft in IFR conditions unless it carries enough fuel (considering weather reports and forecasts and weather conditions) to—

(1) Complete the flight to the first airport of intended landing;

(2) Fly from that airport to the alternate airport; and

(3) Fly after that for 45 minutes at normal cruising speed or, for helicopters, fly after that for 30 minutes at normal cruising speed.

(b) Paragraph (a)(2) of this section does not apply if—

(1) Part 97 of this chapter prescribes a standard instrument approach procedure for the first airport of intended landing; and

(2) For at least 1 hour before and 1 hour after the estimated time of arrival at the airport, the weather reports or forecasts or any combination of them indicate—

(i) The ceiling will be at least 2,000 feet above the airport elevation; and

(ii) Visibility will be at least 3 statute miles.

#### §91.169 IFR flight plan: Information required.

(a) *Information required.* Unless otherwise authorized by ATC, each person filing an IFR flight plan shall include in it the following information:

(1) Information required under §91.153(a).

(2) An alternate airport, except as provided in paragraph (b) of this section.

(b) *Exceptions to applicability of paragraph (a)(2) of this section.* Paragraph (a)(2) of this section does not apply if part 97 of this chapter prescribes a standard instrument approach procedure for the first airport of intended landing and, for at least 1 hour before and 1 hour after the estimated time of arrival, the weather reports or forecasts, or any combination of them, indicate—

(1) The ceiling will be at least 2,000 feet above the airport elevation; and

(2) The visibility will be at least 3 statute miles.

(c) *IFR alternate airport weather minimums.* Unless otherwise authorized by the Administrator, no person may include an alternate airport in an IFR flight plan unless current weather forecasts indicate that, at the estimated time of arrival at the alternate airport, the ceiling and visibility at

ned in that procedure or, if none are so specified, the following minimums:

(i) Precision approach procedure: Ceiling 600 feet and visibility 2 statute miles.

(ii) Nonprecision approach procedure: Ceiling 800 feet and visibility 2 statute miles.

(2) If no instrument approach procedure has been published in part 97 of this chapter for that airport, the ceiling and visibility minimums are those allowing descent from the MEA, approach, and landing under basic VFR.

(d) *Cancellation.* When a flight plan has been activated, the pilot in command, upon canceling or completing the flight under the flight plan, shall notify an FAA Flight Service Station or ATC facility.

#### **§91.171 VOR equipment check for IFR operations.**

(a) No person may operate a civil aircraft under IFR using the VOR system of radio navigation unless the VOR equipment of that aircraft—

(1) Is maintained, checked, and inspected under an approved procedure; or

(2) Has been operationally checked within the preceding 30 days, and was found to be within the limits of the permissible indicated bearing error set forth in paragraph (b) or (c) of this section.

(b) Except as provided in paragraph (c) of this section, each person conducting a VOR check under paragraph (a)(2) of this section shall—

(1) Use, at the airport of intended departure, an FAA-operated or approved test signal or a test signal radiated by a certificated and appropriately rated radio repair station or, outside the United States, a test signal operated or approved by an appropriate authority to check the VOR equipment (the maximum permissible indicated bearing error is plus or minus 4 degrees); or

(2) Use, at the airport of intended departure, a point on the airport surface designated as a VOR system checkpoint by the Administrator, or, outside the United States, by an appropriate authority (the maximum permissible bearing error is plus or minus 4 degrees);

(3) If neither a test signal nor a designated checkpoint on the surface is available, use an airborne checkpoint designated by the Adminis-

(i) Select a VOR radial that lies along the centerline of an established VOR airway;

(ii) Select a prominent ground point along the selected radial preferably more than 20 nautical miles from the VOR ground facility and maneuver the aircraft directly over the point at a reasonably low altitude; and

(iii) Note the VOR bearing indicated by the receiver when over the ground point (the maximum permissible variation between the published radial and the indicated bearing is 6 degrees).

(c) If dual system VOR (units independent of each other except for the antenna) is installed in the aircraft, the person checking the equipment may check one system against the other in place of the check procedures specified in paragraph (b) of this section. Both systems shall be tuned to the same VOR ground facility and note the indicated bearings to that station. The maximum permissible variation between the two indicated bearings is 4 degrees.

(d) Each person making the VOR operational check, as specified in paragraph (b) or (c) of this section, shall enter the date, place, bearing error, and sign the aircraft log or other record. In addition, if a test signal radiated by a repair station, as specified in paragraph (b)(1) of this section, is used, an entry must be made in the aircraft log or other record by the repair station certificate holder or the certificate holder's representative certifying to the bearing transmitted by the repair station for the check and the date of transmission.

(Approved by the Office of Management and Budget under OMB control number 2120-0005).

#### **§91.173 ATC clearance and flight plan required.**

No person may operate an aircraft in controlled airspace under IFR unless that person has—

(a) Filed an IFR flight plan; and

(b) Received an appropriate ATC clearance.

#### **§91.175 Takeoff and landing under IFR.**

(a) *Instrument approaches to civil airports.* Unless otherwise authorized by the Administrator, when an instrument letdown to a civil airport is necessary, each person operating an aircraft, except

or MDA, the authorized DH or MDA is the highest of the following:

(1) The DH or MDA prescribed by the approach procedure.

(2) The DH or MDA prescribed for the pilot in command.

(3) The DH or MDA for which the aircraft is equipped.

(c) *Operation below DH or MDA.* Where a DH or MDA is applicable, no pilot may operate an aircraft, except a military aircraft of the United States, at any airport below the authorized MDA or continue an approach below the authorized DH unless—

(1) The aircraft is continuously in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal maneuvers, and for operations conducted under part 121 or part 135 unless that descent rate will allow touchdown to occur within the touchdown zone of the runway of intended landing;

(2) The flight visibility is not less than the visibility prescribed in the standard instrument approach being used; and

(3) Except for a Category II or Category III approach where any necessary visual reference requirements are specified by the Administrator, at least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:

(i) The approach light system, except that the pilot may not descend below 100 feet above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the red side row bars are also distinctly visible and identifiable.

(ii) The threshold.

(iii) The threshold markings.

(iv) The threshold lights.

(v) The runway end identifier lights.

(vi) The visual approach slope indicator.

(vii) The touchdown zone or touchdown zone markings.

(viii) The touchdown zone lights.

(ix) The runway or runway markings.

(x) The runway lights.

operating an aircraft, except a military aircraft of the United States, shall immediately execute an appropriate missed approach procedure when either of the following conditions exist:

(1) Whenever the requirements of paragraph (c) of this section are not met at either of the following times:

(i) When the aircraft is being operated below MDA; or

(ii) Upon arrival at the missed approach point, including a DH where a DH is specified and its use is required, and at any time after that until touchdown.

(2) Whenever an identifiable part of the airport is not distinctly visible to the pilot during a circling maneuver at or above MDA, unless the inability to see an identifiable part of the airport results only from a normal bank of the aircraft during the circling approach.

(f) *Civil airport takeoff minimums.* Unless otherwise authorized by the Administrator, no pilot operating an aircraft under parts 121, 125, 127, 129, or 135 of this chapter may take off from a civil airport under IFR unless weather conditions are at or above the weather minimum for IFR takeoff prescribed for that airport under part 97 of this chapter. If takeoff minimums are not prescribed under part 97 of this chapter for a particular airport, the following minimums apply to takeoffs under IFR for aircraft operating under those parts:

(1) For aircraft, other than helicopters, having two engines or less—1 statute mile visibility.

(2) For aircraft having more than two engines—1/2 statute mile visibility.

(3) For helicopters—1/2 statute mile visibility.

(g) *Military airports.* Unless otherwise prescribed by the Administrator, each person operating a civil aircraft under IFR into or out of a military airport shall comply with the instrument approach procedures and the takeoff and landing minimum prescribed by the military authority having jurisdiction of that airport.

(h) *Comparable values of RVR and ground visibility.*

(1) Except for Category II or Category III minimums, if RVR minimums for takeoff or landing are prescribed in an instrument approach procedure, but RVR is not reported for the run-

RVR (feet)	Visibility (statute miles)
1,600 .....	1/4
2,400 .....	1/2
3,200 .....	5/8
4,000 .....	3/4
4,500 .....	7/8
5,000 .....	1
6,000 .....	1 1/4

(i) *Operations on unpublished routes and use of radar in instrument approach procedures.* When radar is approved at certain locations for ATC purposes, it may be used not only for surveillance and precision radar approaches, as applicable, but also may be used in conjunction with instrument approach procedures predicated on other types of radio navigational aids. Radar vectors may be authorized to provide course guidance through the segments of an approach to the final course or fix. When operating on an unpublished route or while being radar vectored, the pilot, when an approach clearance is received, shall, in addition to complying with § 91.177, maintain the last altitude assigned to that pilot until the aircraft is established on a segment of a published route or instrument approach procedure unless a different altitude is assigned by ATC. After the aircraft is so established, published altitudes apply to descent within each succeeding route or approach segment unless a different altitude is assigned by ATC. Upon reaching the final approach course or fix, the pilot may either complete the instrument approach in accordance with a procedure approved for the facility or continue a surveillance or precision radar approach to a landing.

(j) *Limitation on procedure turns.* In the case of a radar vector to a final approach course or fix, a timed approach from a holding fix, or an approach for which the procedure specifies "No PT," no pilot may make a procedure turn unless cleared to do so by ATC.

(k) *ILS components.* The basic ground components of an ILS are the localizer, glide slope, outer marker, middle marker, and, when installed for use with Category II or Category III instrument approach procedures, an inner marker. A compass locator or precision radar may be substituted for

appropriate part 97 approach procedure, letter of authorization, or operations specification pertinent to the operations.

#### § 91.177 Minimum altitudes for IFR operations.

(a) *Operation of aircraft at minimum altitudes.* Except when necessary for takeoff or landing, no person may operate an aircraft under IFR below—

- (1) The applicable minimum altitudes prescribed in parts 95 and 97 of this chapter; or
- (2) If no applicable minimum altitude is prescribed in those parts—

(i) In the case of operations over an area designated as a mountainous area in part 95, an altitude of 2,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown; or

(ii) In any other case, an altitude of 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown.

However, if both a MEA and a MOCA are prescribed for a particular route or route segment, a person may operate an aircraft below the MEA down to, but not below, the MOCA, when within 22 nautical miles of the VOR concerned (based on the pilot's reasonable estimate of that distance).

(b) *Climb.* Climb to a higher minimum IFR altitude shall begin immediately after passing the point beyond which that minimum altitude applies, except that when ground obstructions intervene, the point beyond which that higher minimum altitude applies shall be crossed at or above the applicable MCA.

#### § 91.179 IFR cruising altitude or flight level.

(a) *In controlled airspace.* Each person operating an aircraft under IFR in level cruising flight in controlled airspace shall maintain the altitude or flight level assigned that aircraft by ATC. However, if the ATC clearance assigns "VFR conditions on-top," that person shall maintain an altitude or flight level as prescribed by § 91.159.

(b) *In uncontrolled airspace.* Except while in a holding pattern of 2 minutes or less or while turning, each person operating an aircraft under IFR in level cruising flight in uncontrolled airspace shall maintain an appropriate altitude as follows:



(ii) On a magnetic course of 180 degrees through 359 degrees, any even thousand foot MSL altitude (such as 2,000, 4,000, or 6,000).  
(2) When operating at or above 18,000 feet MSL but below flight level 290, and—

(i) On a magnetic course of zero degrees through 179 degrees, any odd flight level (such as 190, 210, or 230); or

(ii) On a magnetic course of 180 degrees through 359 degrees, any even flight level (such as 180, 200, or 220).

(3) When operating at flight level 290 and above, and—

(i) On a magnetic course of zero degrees through 179 degrees, any flight level, at 4,000-foot intervals, beginning at and including flight level 290 (such as flight level 290, 330, or 370); or

(ii) On a magnetic course of 180 degrees through 359 degrees, any flight level, at 4,000-foot intervals, beginning at and including flight level 310 (such as flight level 310, 350, or 390).

#### **§ 91.181 Course to be flown.**

Unless otherwise authorized by ATC, no person may operate an aircraft within controlled airspace under IFR except as follows:

(a) On a Federal airway, along the centerline of that airway.

(b) On any other route, along the direct course between the navigational aids or fixes defining that route. However, this section does not prohibit maneuvering the aircraft to pass well clear of other air traffic or the maneuvering of the aircraft in VFR conditions to clear the intended flight path both before and during climb or descent.

#### **§ 91.183 IFR radio communications.**

The pilot in command of each aircraft operated under IFR in controlled airspace shall have a continuous watch maintained on the appropriate frequency and shall report by radio as soon as possible—

(a) The time and altitude of passing each designated reporting point, or the reporting points specified by ATC, except that while the aircraft

of flight.

#### **§ 91.185 IFR operations: Two-way radio communications failure.**

(a) *General.* Unless otherwise authorized by ATC, each pilot who has two-way radio communications failure when operating under IFR shall comply with the rules of this section.

(b) *VFR conditions.* If the failure occurs in VFR conditions, or if VFR conditions are encountered after the failure, each pilot shall continue the flight under VFR and land as soon as practicable.

(c) *IFR conditions.* If the failure occurs in IFR conditions, or if paragraph (b) of this section cannot be complied with, each pilot shall continue the flight according to the following:

(1) *Route.*

(i) By the route assigned in the last ATC clearance received;

(ii) If being radar vectored, by the direct route from the point of radio failure to the fix, route, or airway specified in the vector clearance;

(iii) In the absence of an assigned route, by the route that ATC has advised may be expected in a further clearance; or

(iv) In the absence of an assigned route or a route that ATC has advised may be expected in a further clearance, by the route filed in the flight plan.

(2) *Altitude.* At the highest of the following altitudes or flight levels for the route segment being flown:

(i) The altitude or flight level assigned in the last ATC clearance received;

(ii) The minimum altitude (converted, if appropriate, to minimum flight level as prescribed in § 91.121(c)) for IFR operations; or

(iii) The altitude or flight level ATC has advised may be expected in a further clearance.

(3) *Leave clearance limit.*

(i) When the clearance limit is a fix from which an approach begins, commence descent or descent and approach as close as possible to the expect-further-clearance time if one has been received, or if one has not been received, as close as possible to the estimated time of

received, upon arrival over the clearance limit, and proceed to a fix from which an approach begins and commence descent or descent and approach as close as possible to the estimated time of arrival as calculated from the filed or amended (with ATC) estimated time en route.

**§91.187 Operation under IFR in controlled airspace: Malfunction reports.**

(a) The pilot in command of each aircraft operated in controlled airspace under IFR shall report as soon as practical to ATC any malfunctions of navigational, approach, or communication equipment occurring in flight.

(b) In each report required by paragraph (a) of this section, the pilot in command shall include the—

- (1) Aircraft identification;
- (2) Equipment affected;
- (3) Degree to which the capability of the pilot to operate under IFR in the ATC system is impaired; and
- (4) Nature and extent of assistance desired from ATC.

**§91.189 Category II and III operations: General operating rules.**

(a) No person may operate a civil aircraft in a Category II or III operation unless—

(1) The flight crew of the aircraft consists of a pilot in command and a second in command who hold the appropriate authorizations and ratings prescribed in § 61.3 of this chapter;

(2) Each flight crewmember has adequate knowledge of, and familiarity with, the aircraft and the procedures to be used; and

(3) The instrument panel in front of the pilot who is controlling the aircraft has appropriate instrumentation for the type of flight control guidance system that is being used.

(b) Unless otherwise authorized by the Administrator, no person may operate a civil aircraft in a Category II or Category III operation unless each ground component required for that operation and the related airborne equipment is installed and operating.

(2) The DH prescribed for the pilot in command.

(3) The DH for which the aircraft is equipped.

(d) Unless otherwise authorized by the Administrator, no pilot operating an aircraft in a Category II or Category III approach that provides and requires use of a DH may continue the approach below the authorized decision height unless the following conditions are met:

(1) The aircraft is in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal maneuvers, and where that descent rate will allow touchdown to occur within the touchdown zone of the runway of intended landing.

(2) At least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:

(i) The approach light system, except that the pilot may not descend below 100 feet above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the red side row bars are also distinctly visible and identifiable.

(ii) The threshold.

(iii) The threshold markings.

(iv) The threshold lights.

(v) The touchdown zone or touchdown zone markings.

(vi) The touchdown zone lights.

(e) Unless otherwise authorized by the Administrator, each pilot operating an aircraft shall immediately execute an appropriate missed approach whenever, prior to touchdown, the requirements of paragraph (d) of this section are not met.

(f) No person operating an aircraft using a Category III approach without decision height may land that aircraft except in accordance with the provisions of the letter of authorization issued by the Administrator.

(g) Paragraphs (a) through (f) of this section do not apply to operations conducted by the holders of certificates issued under part 121, 125, 129, or 135 of this chapter. No person may operate a civil aircraft in a Category II or Category III operation conducted by the holder of a certificate issued under part 121, 125, 129, or 135 of this chapter unless

ate a U.S.-registered civil aircraft in a Category II or a Category III operation unless—

(1) [There is available in the aircraft a current and approved Category II or Category III manual, as appropriate, for that aircraft;

(2) [The operation is conducted in accordance with the procedures, instructions, and limitations in the appropriate manual; and

(3) [The instruments and equipment listed in the manual that are required for a particular Category II or Category III operation have been inspected and maintained in accordance with the maintenance program contained in the manual.

(b) [Each operator must keep a current copy of each approved manual at its principal base of

#### **§91.193 Certificate of authorization for certain Category II operations.**

The Administrator may issue a certificate of authorization authorizing deviations from the requirements of § 91.189, § 91.191, and § 91.205(f) for the operation of small aircraft identified as Category A aircraft in § 97.3 of this chapter in Category II operations if the Administrator finds that the proposed operation can be safely conducted under the terms of the certificate. Such authorization does not permit operation of the aircraft carrying persons or property for compensation or hire.

#### **§§ 91.195 — 91.199 [Reserved]**



# Subpart C—Equipment, Instrument, and Certificate Requirements

## §91.201 [Reserved]

## §91.203 Civil aircraft: Certifications required.

(a) Except as provided in §91.715, no person may operate a civil aircraft unless it has within it the following:

(1) An appropriate and current airworthiness certificate. Each U.S. airworthiness certificate used to comply with this subparagraph (except a special flight permit, a copy of the applicable operations specifications issued under §21.197(c) of this chapter, appropriate sections of the air carrier manual required by parts 121 and 135 of this chapter containing that portion of the operations specifications issued under §21.197(c), or an authorization under §91.611) must have on it the registration number assigned to the aircraft under part 47 of this chapter. However, the airworthiness certificate need not have on it an assigned special identification number before 10 days after that number is first affixed to the aircraft. A revised airworthiness certificate having on it an assigned special identification number, that has been affixed to an aircraft, may only be obtained upon application to an FAA Flight Standards district office.

(2) An effective U.S. registration certificate issued to its owner or, for operation within the United States, the second duplicate copy (pink) of the Aircraft Registration Application as provided for in §47.31(b), or a registration certificate issued under the laws of a foreign country.

(b) No person may operate a civil aircraft unless the airworthiness certificate required by paragraph (a) of this section or a special flight authorization issued under §91.715 is displayed at the cabin or cockpit entrance so that it is legible to passengers or crew.

(c) No person may operate an aircraft with a fuel tank installed within the passenger compartment or a baggage compartment unless the installation was accomplished pursuant to part 43 of this chapter, and a copy of FAA Form 337 authorizing that installation is on board the aircraft.

[(d) No person may operate a civil airplane (domestic or foreign) into or out of an airport in

the United States unless it complies with the fuel venting and exhaust emissions requirements of part 34 of this chapter.]

[(Amdt. 91-218, Eff. 9/10/90)]

## §91.205 Powered civil aircraft with standard category U.S. airworthiness certificates: Instrument and equipment requirements.

(a) *General.* Except as provided in paragraphs (c)(3) and (e) of this section, no person may operate a powered civil aircraft with a standard category U.S. airworthiness certificate in any operation described in paragraphs (b) through (f) of this section unless that aircraft contains the instruments and equipment specified in those paragraphs (or FAA-approved equivalents) for that type of operation, and those instruments and items of equipment are in operable condition.

(b) *Visual-flight rules (day).* For VFR flight during the day, the following instruments and equipment are required:

- (1) Airspeed indicator.
- (2) Altimeter.
- (3) Magnetic direction indicator.
- (4) Tachometer for each engine.
- (5) Oil pressure gauge for each engine using pressure system.
- (6) Temperature gauge for each liquid-cooled engine.
- (7) Oil temperature gauge for each air-cooled engine.
- (8) Manifold pressure gauge for each altitude engine.
- (9) Fuel gauge indicating the quantity of fuel in each tank.
- (10) Landing gear position indicator, if the aircraft has a retractable landing gear.

(11) For small civil airplanes certificated after March 11, 1996, in accordance with part 23 of this chapter, an approved aviation red or aviation white anticollision light system. In the event of failure of any light of the anticollision light system, operation of the aircraft may continue to a location where repairs or replacement can be made.

to the water which is above the high water mark and excludes land areas which are intermittently under water.

(13) An approved safety belt with an approved metal-to-metal latching device for each occupant 2 years of age or older.

(14) For small civil airplanes manufactured after July 18, 1978, an approved shoulder harness for each front seat. The shoulder harness must be designed to protect the occupant from serious head injury when the occupant experiences the ultimate inertia forces specified in § 23.561(b)(2) of this chapter. Each shoulder harness installed at a flight crewmember station must permit the crewmember, when seated and with the safety belt and shoulder harness fastened, to perform all functions necessary for flight operations. For purposes of this paragraph—

(i) The date of manufacture of an airplane is the date the inspection acceptance records reflect that the airplane is complete and meets the FAA-approved type design data; and

(ii) A front seat is a seat located at a flight crewmember station or any seat located alongside such a seat.

(15) An emergency locator transmitter, if required by § 91.207.

(16) For normal, utility, and acrobatic category airplanes with a seating configuration, excluding pilot seats, of 9 or less, manufactured after December 12, 1986, a shoulder harness for—

(i) Each front seat that meets the requirements of § 23.785(g) and (h) of this chapter in effect on December 12, 1985;

(ii) Each additional seat that meets the requirements of § 23.785(g) of this chapter in effect on December 12, 1985.

(17) For rotorcraft manufactured after September 16, 1992, a shoulder harness for each seat that meets the requirements of § 27.2 or § 29.2 of this chapter in effect on September 16, 1991.

(c) *Visual flight rules (night)*. For VFR flight at night, the following instruments and equipment are required:

(1) Instruments and equipment specified in paragraph (b) of this section.

(2) Approved position lights.

are anticollision light standards of part 135, 137, 27, or 29 of this chapter, as applicable, that were in effect on August 10, 1971, except that the color may be either aviation red or aviation white. In the event of failure of any light of the anticollision light system, operations with the aircraft may be continued to a stop where repairs or replacement can be made.

(4) If the aircraft is operated for hire, one electric landing light.

(5) An adequate source of electrical energy for all installed electrical and radio equipment.

(6) One spare set of fuses, or three spare fuses of each kind required, that are accessible to the pilot in flight.

(d) *Instrument flight rules*. For IFR flight, the following instruments and equipment are required:

(1) Instruments and equipment specified in paragraph (b) of this section, and, for night flight, instruments and equipment specified in paragraph (c) of this section.

(2) Two-way radio communications system and navigational equipment appropriate to the ground facilities to be used.

(3) Gyroscopic rate-of-turn indicator, except on the following aircraft:

(i) Airplanes with a third attitude instrument system usable through flight attitudes of 360 degrees of pitch and roll and installed in accordance with the instrument requirements prescribed in § 121.305(j) of this chapter; and:

(ii) Rotorcraft with a third attitude instrument system usable through flight attitudes of  $\pm 80$  degrees of pitch and  $\pm 120$  degrees of roll and installed in accordance with § 29.1303(g) of this chapter.

(4) Slip-skid indicator.

(5) Sensitive altimeter adjustable for barometric pressure.

(6) A clock displaying hours, minutes, and seconds with a sweep-second pointer or digital presentation.

(7) Generator or alternator of adequate capacity.

(8) Gyroscopic pitch and bank indicator (artificial horizon).

(9) Gyroscopic direction indicator (directional gyro or equivalent).

approved distance measuring equipment (DME). When DME required by this paragraph fails at and above FL 240, the pilot in command of the aircraft shall notify ATC immediately, and then may continue operations at and above FL 240 to the next airport of intended landing at which repairs or replacement of the equipment can be made.

(f) *Category II operations.* [The requirements for Category II operations are the instruments and equipment specified in—

[(1) Paragraph (d) of this section; and

[(2) Appendix A to this part.

[(g) *Category III operations.* The instruments and equipment required for Category III operations are specified in paragraph (d) of this section.

[(h) *Exclusions.* Paragraphs (f) and (g) of this section do not apply to operations conducted by a holder of a certificate issued under part 121 or part 135 of this chapter.]

(Amdt. 91-220, Eff. 11/26/90); (Amdt. 91-223, Eff. 9/16/91); (Amdt. 91-231, Eff. 10/15/92); (Amdt. 91-248, Eff. 3/11/96); [(Amdt. 91-251, Eff. 8/1/96)]

### § 91.207 Emergency locator transmitters.

(a) [Except as provided in paragraphs (e) and (f) of this section, no person may operate a U.S.-registered civil airplane unless—]

(1) [There is attached to the airplane an approved automatic type emergency locator transmitter that is in operable condition for the following operations, except that after June 21, 1995, an emergency locator transmitter that meets the requirements of TSO-C91 may not be used for new installations:]

(i) Those operations governed by the supplemental air carrier and commercial operator rules of parts 121 and 125.;

(ii) Charter flights governed by the domestic and flag air carrier rules of part 121 of this chapter; and

(iii) Operations governed by part 135 of this chapter; or

(2) [For operations other than those specified in paragraph (a)(1) of this section, there must be attached to the airplane an approved personal type or an approved automatic type emergency locator transmitter that is in operable condition,

to the airplane in such a manner that the probability of damage to the transmitter in the event of crash impact is minimized. Fixed and deployable automatic type transmitters must be attached to the airplane as far aft as practicable.

(c) Batteries used in the emergency locator transmitters required by paragraphs (a) and (b) of this section must be replaced (or recharged, if the batteries are rechargeable)—

(1) When the transmitter has been in use for more than 1 cumulative hour; or

(2) [When 50 percent of their useful life (or, for rechargeable batteries, 50 percent of their useful life of charge) has expired, as established by the transmitter manufacturer under its approval.]

The new expiration date for replacing (or recharging) the battery must be legibly marked on the outside of the transmitter and entered in the aircraft maintenance record. Paragraph (c)(2) of this section does not apply to batteries (such as water-activated batteries) that are essentially unaffected during probable storage intervals.

[(d) Each emergency locator transmitter required by paragraph (a) of this section must be inspected within 12 calendar months after the last inspection for—

(1) Proper installation;

(2) Battery corrosion;

(3) Operation of the controls and crash sensor; and

(4) The presence of a sufficient signal radiated from its antenna.]

[(e)] Notwithstanding paragraph (a) of this section, a person may—

(1) Ferry a newly acquired airplane from the place where possession of it was taken to a place where the emergency locator transmitter is to be installed; and

(2) Ferry an airplane with an inoperative emergency locator transmitter from a place where repairs or replacements cannot be made to a place where they can be made.

No person other than required crewmembers may be carried aboard an airplane being ferried under paragraph [(e)] of this section.

[(f)] Paragraph (a) of this section does not apply to—

flight operations began;

(4) Aircraft while engaged in flight operations incident to design and testing;

(5) New aircraft while engaged in flight operations incident to their manufacture, preparation, and delivery;

(6) Aircraft while engaged in flight operations incident to the aerial application of chemicals and other substances for agricultural purposes;

(7) Aircraft certificated by the Administrator for research and development purposes;

(8) Aircraft while used for showing compliance with regulations, crew training, exhibition, air racing, or market surveys;

(9) Aircraft equipped to carry not more than one person; and

(10) An aircraft during any period for which the transmitter has been temporarily removed for inspection, repair, modification, or replacement, subject to the following:

(i) No person may operate the aircraft unless the aircraft records contain an entry which includes the date of initial removal, the make, model, serial number, and reason for removing the transmitter, and a placard located in view of the pilot to show "ELT not installed."

(ii) No person may operate the aircraft more than 90 days after the ELT is initially removed from the aircraft.

[(Amdt. 91-242, Eff. 6/21/94)]

#### **§ 91.209 Aircraft lights.**

[No person may:

[(a) During the period from sunset to sunrise (or, in Alaska, during the period a prominent unlighted object cannot be seen from a distance of 3 statute miles or the sun is more than 6 degrees below the horizon)—

(1) Operate an aircraft unless it has lighted position lights;

(2) Park or move an aircraft in, or in dangerous proximity to, a night flight operations area of an airport unless the aircraft—

(i) Is clearly illuminated;

(ii) Has lighted position lights; or

(iii) Is in an area that is marked by obstruction lights;

need not be lighted when the pilot-in-command determines that, because of operating conditions, it would be in the interest of safety to turn the lights off.]

[(Amdt. 91-248, Eff. 3/11/96)]

#### **§ 91.211 Supplemental oxygen.**

(a) *General.* No person may operate a civil aircraft of U.S. registry—

(1) At cabin pressure altitudes above 12,500 feet (MSL) up to and including 14,000 feet (MSL) unless the required minimum flight crew is provided with and uses supplemental oxygen for that part of the flight at those altitudes that is of more than 30 minutes duration;

(2) At cabin pressure altitudes above 14,000 feet (MSL) unless the required minimum flight crew is provided with and uses supplemental oxygen during the entire flight time at those altitudes; and

(3) At cabin pressure altitudes above 15,000 feet (MSL) unless each occupant of the aircraft is provided with supplemental oxygen.

(b) *Pressurized cabin aircraft.*

(1) No person may operate a civil aircraft of U.S. registry with a pressurized cabin—

(i) At flight altitudes above flight level 250 unless at least a 10-minute supply of supplemental oxygen, in addition to any oxygen required to satisfy paragraph (a) of this section, is available for each occupant of the aircraft for use in the event that a descent is necessitated by loss of cabin pressurization; and

(ii) At flight altitudes above flight level 350 unless one pilot at the controls of the airplane is wearing and using an oxygen mask that is secured and sealed and that either supplies oxygen at all times or automatically supplies oxygen whenever the cabin pressure altitude of the airplane exceeds 14,000 feet (MSL), except that the one pilot need not wear and use an oxygen mask while at or below flight level 410 if there are two pilots at the controls and each pilot has a quick-donning type of oxygen mask that can be placed on the face with one hand from the ready position within



flight level 350, the remaining pilot at the controls shall put on and use an oxygen mask until the other pilot has returned to that crewmember's station.

### **§ 91.213 Inoperative instruments and equipment.**

(a) Except as provided in paragraph (d) of this section, no person may take off an aircraft with inoperative instruments or equipment installed unless the following conditions are met:

(1) An approved Minimum Equipment List exists for that aircraft.

(2) The aircraft has within it a letter of authorization, issued by the FAA Flight Standards district office having jurisdiction over the area in which the operator is located, authorizing operation of the aircraft under the Minimum Equipment List. The letter of authorization may be obtained by written request of the airworthiness certificate holder. The Minimum Equipment List and the letter of authorization constitute a supplemental type certificate for the aircraft.

(3) The approved Minimum Equipment List must—

(i) Be prepared in accordance with the limitations specified in paragraph (b) of this section; and

(ii) Provide for the operation of the aircraft with the instruments and equipment in an inoperable condition.

(4) The aircraft records available to the pilot must include an entry describing the inoperable instruments and equipment.

(5) The aircraft is operated under all applicable conditions and limitations contained in the Minimum Equipment List and the letter authorizing the use of the list.

(b) The following instruments and equipment may not be included in a Minimum Equipment List:

(1) Instruments and equipment that are either specifically or otherwise required by the airworthiness requirements under which the aircraft is type certificated and which are essential for safe operations under all operating conditions.

(2) Instruments and equipment required by an airworthiness directive to be in operable condition

under part 121, 125, or 135 of this chapter shall use that Minimum Equipment List in connection with operations conducted with that aircraft under this part without additional approval requirements.

(d) Except for operations conducted in accordance with paragraph (a) or (c) of this section, a person may takeoff an aircraft in operations conducted under this part with inoperative instruments and equipment without an approved Minimum Equipment List provided—

(1) The flight operation is conducted in a—

(i) Rotorcraft, nonturbine-powered airplane, glider, or lighter-than-air aircraft for which a master Minimum Equipment List has not been developed; or

(ii) Small rotorcraft, nonturbine-powered small airplane, glider, or lighter-than-air aircraft for which a Master Minimum Equipment List has been developed; and

(2) The inoperative instruments and equipment are not—

(i) Part of the VFR-day type certification instruments and equipment prescribed in the applicable airworthiness regulations under which the aircraft was type certificated;

(ii) Indicated as required on the aircraft's equipment list, or on the Kinds of Operations Equipment List for the kind of flight operation being conducted;

(iii) Required by § 91.205 or any other rule of this part for the specific kind of flight operation being conducted; or

(iv) Required to be operational by an airworthiness directive; and

(3) The inoperative instruments and equipment are—

(i) Removed from the aircraft, the cockpit control placarded, and the maintenance recorded in accordance with § 43.9 of this chapter; or

(ii) Deactivated and placarded "Inoperative." If deactivation of the inoperative instrument or equipment involves maintenance, it must be accomplished and recorded in accordance with part 43 of this chapter; and

(4) A determination is made by a pilot, who is certificated and appropriately rated under part 61 of this chapter, or by a person, who is certifi-

a properly altered condition acceptable to the Administrator.

(e) Notwithstanding any other provision of this section, an aircraft with inoperable instruments or equipment may be operated under a special flight permit issued in accordance with § 21.197 and § 21.199 of this chapter.

#### **§ 91.215 ATC transponder and altitude reporting equipment and use.**

(a) *All airspace: U.S.-registered civil aircraft.* [For operations not conducted under part 121, 127 or 135 of this chapter, ATC transponder equipment installed must meet the performance and environmental requirements of any class of TSO-C74b (Mode A) or any class of TSO-C74c (Mode A with altitude reporting capability) as appropriate, or the appropriate class of TSO-C112 (Mode S).]

(b) All airspace. Unless otherwise authorized or directed by ATC, no person may operate an aircraft in the airspace described in paragraphs (b)(1) through (b)(5) of this section, unless that aircraft is equipped with an operable coded radar beacon transponder having either Mode 3/A 4096 code capability, replying to Mode 3/A interrogations with the code specified by ATC, or a Mode S capability, replying to Mode 3/A interrogations with the code specified by ATC and intermode and Mode S interrogations in accordance with the applicable provisions specified in TSO C-112, and that aircraft is equipped with automatic pressure altitude reporting equipment having a Mode C capability that automatically replies to Mode C interrogations by transmitting pressure altitude information in 100-foot increments. This requirement applies—

(1) All aircraft. In Class A, Class B, and Class C airspace areas;

(2) All aircraft. In all airspace within 30 nautical miles of an airport listed in appendix D, section 1 of this part from the surface upward to 10,000 feet MSL;

(3) Notwithstanding paragraph (b)(2) of this section, any aircraft which was not originally certificated with an engine-driven electrical system or which has not subsequently been certified with such a system installed, balloon or glider may conduct operations in the airspace within 30 nautical miles of an airport listed in appendix D,

for an airport or 10,000 feet MSL, whichever is lower; and

(4) All aircraft in all airspace above the ceiling and within the lateral boundaries of a Class B or Class C airspace area designated for an airport upward to 10,000 feet MSL; and

(5) All aircraft except any aircraft which was not originally certificated with an engine-driven electrical system or which has not subsequently been certified with such a system installed, balloon, or glider—

(i) In all airspace of the 48 contiguous states and the District of Columbia at and above 10,000 feet MSL, excluding the airspace at and below 2,500 feet above the surface; and

(ii) In the airspace from the surface to 10,000 feet MSL within a 10-nautical-mile radius of any airport listed in appendix D, section 2 of this part, excluding the airspace below 1,200 feet outside of the lateral boundaries of the surface area of the airspace designated for that airport.

(c) *Transponder-on operation.* While in the airspace as specified in paragraph (b) of this section or in all controlled airspace, each person operating an aircraft equipped with an operable ATC transponder maintained in accordance with § 91.413 of this part shall operate the transponder, including Mode C equipment if installed, and shall reply on the appropriate code or as assigned by ATC.

(d) ATC authorized deviations. Requests for ATC authorized deviations must be made to the ATC facility having jurisdiction over the concerned airspace within the time periods specified as follows:

(1) For operation of an aircraft with an operating transponder but without operating automatic pressure altitude reporting equipment having a Mode C capability, the request may be made at any time.

(2) For operation of an aircraft with an inoperative transponder to the airport of ultimate destination, including any intermediate stops, or to proceed to a place where suitable repairs can be made or both, the request may be made at any time.

(3) For operation of an aircraft that is not equipped with a transponder, the request must

**§91.217 Data correspondence between automatically reported pressure altitude data and the pilot's altitude reference.**

No person may operate any automatic pressure altitude reporting equipment associated with a radar beacon transponder—

(a) When deactivation of that equipment is directed by ATC;

(b) Unless, as installed, that equipment was tested and calibrated to transmit altitude data corresponding within 125 feet (on a 95 percent probability basis) of the indicated or calibrated datum of the altimeter normally used to maintain flight altitude, with that altimeter referenced to 29.92" of mercury for altitudes from sea level to the maximum operating altitude of the aircraft; or

(c) Unless the altimeters and digitizers in that equipment meet the standards of TSO C10b and TSO C88, respectively.

**§91.219 Altitude alerting system or device: Turbojet-powered civil airplanes.**

(a) Except as provided in paragraph (d) of this section, no person may operate a turbojet-powered U.S.-registered civil airplane unless that airplane is equipped with an approved altitude alerting system or device that is in operable condition and meets the requirements of paragraph (b) of this section.

(b) Each altitude alerting system or device required by paragraph (a) of this section must be able to—

(1) Alert the pilot—

(i) Upon approaching a preselected altitude in either ascent or descent, by a sequence of both aural and visual signals in sufficient time to establish level flight at that preselected altitude; or

(ii) Upon approaching a preselected altitude in either ascent or descent, by a sequence of visual signals in sufficient time to establish level flight at that preselected altitude, and when deviating above and below that preselected altitude, by an aural signal;

(2) Provide the required signals from sea level to the highest operating altitude approved for the airplane in which it is installed;

(5) Accept necessary barometric pressure settings if the system or device operates on barometric pressure.

However, for operation below 3,000 feet AGL, the system or device need only provide one signal, either visual or aural, to comply with this paragraph. A radio altimeter may be included to provide the signal if the operator has an approved procedure for its use to determine DH or MDA, as appropriate.

(c) Each operator to which this section applies must establish and assign procedures for the use of the altitude alerting system or device and each flight crewmember must comply with those procedures assigned to him.

(d) Paragraph (a) of this section does not apply to any operation of an airplane that has an experimental certificate or to the operation of any airplane for the following purposes:

(1) Ferrying a newly acquired airplane from the place where possession of it was taken to a place where the altitude alerting system or device is to be installed.

(2) Continuing a flight as originally planned, if the altitude alerting system or device becomes inoperative after the airplane has taken off; however, the flight may not depart from a place where repair or replacement can be made.

(3) Ferrying an airplane with any inoperative altitude alerting system or device from a place where repairs or replacements cannot be made to a place where it can be made.

(4) Conducting an airworthiness flight test of the airplane.

(5) Ferrying an airplane to a place outside the United States for the purpose of registering it in a foreign country.

(6) Conducting a sales demonstration of the operation of the airplane.

(7) Training foreign flight crews in the operation of the airplane before ferrying it to a place outside the United States for the purpose of registering it in a foreign country.

**§91.221 Traffic alert and collision avoidance system equipment and use.**

(a) *All airspace: U.S.-registered civil aircraft.* Any traffic alert and collision avoidance system



**§ 91.301 [Reserved]**

**§ 91.303 Aerobatic flight.**

No person may operate an aircraft in aerobatic flight—

- (a) Over any congested area of a city, town, or settlement;
- (b) Over an open air assembly of persons;
- (c) [Within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport;]
- (d) [Within 4 nautical miles of the center line of any Federal airway;]
- (e) [Below an altitude of 1,500 feet above the surface; or ]

[(f) When flight visibility is less than 3 statute miles. For the purposes of this section, aerobatic flight means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight.]

For the purposes of this section, aerobatic flight means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight.

[(Amdt. 91-227, Eff. 9/16/93)]

**§ 91.305 Flight test areas.**

No person may flight test an aircraft except over open water, or sparsely populated areas, having light air traffic.

**§ 91.307 Parachutes and parachuting.**

(a) No pilot of a civil aircraft may allow a parachute that is available for emergency use to be carried in that aircraft unless it is an approved type and—

- (1) If a chair type (canopy in back), it has been packed by a certificated and appropriately rated parachute rigger within the preceding 120 days; or

(2) If any other type, it has been packed by a certificated and appropriately rated parachute rigger—

(i) Within the preceding 120 days, if its canopy, shrouds, and harness are composed exclusively of nylon, rayon, or other similar synthetic fiber or materials that are substantially resistant to damage from mold, mildew, or other fungi and other rotting agents propagated in a moist environment; or

(ii) Within the preceding 60 days, if any part of the parachute is composed of silk, pongee, or other natural fiber, or materials not specified in paragraph (a)(2)(i) of this section.

(b) Except in an emergency, no pilot in command may allow, and no person may make, a parachute jump from an aircraft within the United States except in accordance with part 105.

(c) Unless each occupant of the aircraft is wearing an approved parachute, no pilot of a civil aircraft carrying any person (other than a crewmember) may execute any intentional maneuver that exceeds—

(1) A bank of 60 degrees relative to the horizon; or

(2) A nose-up or nose-down attitude of 30 degrees relative to the horizon.

(d) Paragraph (c) of this section does not apply to—

(1) Flight tests for pilot certification or rating; or

(2) Spins and other flight maneuvers required by the regulations for any certificate or rating when given by—

(i) A certificated flight instructor; or

(ii) An airline transport pilot instructing in accordance with 61.169 of this chapter.

(e) For the purposes of this section, "approved parachute" means—

(1) A parachute manufactured under a type certificate or a technical standard order (C-23 series); or

(2) A personnel-carrying military parachute identified by an NAF, AAF, or AN drawing number, an AAF order number, or any other military designation or specification number.

(2) The towing aircraft is equipped with a tow-hitch of a kind, and installed in a manner, that is approved by the Administrator;

(3) The towline used has breaking strength not less than 80 percent of the maximum certificated operating weight of the glider and not more than twice this operating weight. However, the towline used may have a breaking strength more than twice the maximum certificated operating weight of the glider if—

(i) A safety link is installed at the point of attachment of the towline to the glider with a breaking strength not less than 80 percent of the maximum certificated operating weight of the glider and not greater than twice this operating weight.

(ii) A safety link is installed at the point of attachment of the towline to the towing aircraft with a breaking strength greater, but not more than 25 percent greater, than that of the safety link at the towed glider end of the towline and not greater than twice the maximum certificated operating weight of the glider;

(4) [Before conducting any towing operation within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport, or before making each towing flight within such controlled airspace if required by ATC, the pilot in command notifies the control tower. If a control tower does not exist or is not in operation, the pilot in command must notify the FAA flight service station serving that controlled airspace before conducting any towing operations in that airspace; and]

(5) The pilots of the towing aircraft and the glider have agreed upon a general course of action, including takeoff and release signals, airspeeds, and emergency procedures for each pilot.

(b) No pilot of a civil aircraft may intentionally release a towline, after release of a glider, in a manner that endangers the life or property of another.

[(Amdt. 91-227, Eff. 9/16/93)]

#### **§91.311 Towing: Other than under §91.309**

No pilot of a civil aircraft may tow anything with that aircraft (other than under §91.309) except

(a) No person may operate a restricted category civil aircraft—

(1) For other than the special purpose for which it is certificated; or

(2) In an operation other than one necessary to accomplish the work activity directly associated with that special purpose.

(b) For the purpose of paragraph (a) of this section, operating a restricted category civil aircraft to provide flight crewmember training in a special purpose operation for which the aircraft is certificated is considered to be an operation for that special purpose.

(c) No person may operate a restricted category civil aircraft carrying persons or property for compensation or hire. For the purposes of this paragraph, a special purpose operation involving the carriage of persons or material necessary to accomplish that operation, such as crop dusting, seeding, spraying, and banner towing (including the carrying of required persons or material to the location of that operation), and operation for the purpose of providing flight crewmember training in a special purpose operation, are not considered to be the carriage of persons or property for compensation or hire.

(d) No person may be carried on a restricted category civil aircraft unless that person—

(1) Is a flight crewmember;

(2) Is a flight crewmember trainee;

(3) Performs an essential function in connection with a special purpose operation for which the aircraft is certificated; or

(4) Is necessary to accomplish the work activity directly associated with that special purpose.

(e) Except when operating in accordance with the terms and conditions of a certificate of waiver or special operating limitations issued by the Administrator, no person may operate a restricted category civil aircraft within the United States—

(1) Over a densely populated area;

(2) In a congested airway; or

(3) Near a busy airport where passenger transport operations are conducted.

(f) This section does not apply to nonpassenger-carrying civil rotorcraft external-load operations conducted under part 133 of this chapter.

the ultimate inertia forces specified in § 23.561(b)(2) of this chapter. The shoulder harness installation at each flight crewmember station must permit the crewmember, when seated and with the safety belt and shoulder harness fastened, to perform all functions necessary for flight operation. For purposes of this paragraph—

(1) The date of manufacture of an airplane is the date the inspection acceptance records reflect that the airplane is complete and meets the FAA-approved type design data; and

(2) A front seat is a seat located at a flight crewmember station or any seat located alongside such a seat.

**§ 91.315 Limited category civil aircraft:  
Operating limitations.**

No person may operate a limited category civil aircraft carrying persons or property for compensation or hire.

**§ 91.317 Provisionally certificated civil aircraft:  
Operating limitations.**

(a) No person may operate a provisionally certificated civil aircraft unless that person is eligible for a provisional airworthiness certificate under § 21.213 of this chapter.

(b) No person may operate a provisionally certificated civil aircraft outside the United States unless that person has specific authority to do so from the Administrator and each foreign country involved.

(c) Unless otherwise authorized by the Director, Flight Standards Service, no person may operate a provisionally certificated civil aircraft in air transportation.

(d) Unless otherwise authorized by the Administrator, no person may operate a provisionally certificated civil aircraft except—

(1) In direct conjunction with the type or supplemental type certification of that aircraft;

(2) For training flight crews, including simulated air carrier operations;

(3) Demonstration flight by the manufacturer for prospective purchasers;

(4) Market surveys by the manufacturer;

scribed limitations displayed in the aircraft or set forth in the provisional aircraft flight manual or other appropriate document. However, when operating in direct conjunction with the type or supplemental type certification of the aircraft, that person shall operate under the experimental aircraft limitations of § 21.191 of this chapter and when of this chapter and when flight testing, shall operate under the requirement of § 91.305 of this part.

(f) Each person operating a provisionally certificated civil aircraft shall establish approved procedures for—

(1) The use and guidance of flight and ground personnel in operating under this section; and

(2) Operating in and out of airports where takeoffs or approaches over populated areas are necessary. No person may operate that aircraft except in compliance with the approved procedures.

(g) Each person operating a provisionally certificated civil aircraft shall ensure that each flight crewmember is properly certificated and has adequate knowledge of, and familiarity with, the aircraft and procedures to be used by that crewmember.

(h) Each person operating a provisionally certificated civil aircraft shall maintain it as required by applicable regulations and as may be specially prescribed by the Administrator.

(i) Whenever the manufacturer, or the Administrator, determines that a change in design, construction, or operation is necessary to ensure safe operation, no person may operate a provisionally certificated civil aircraft until that change has been made and approved. Section § 21.99 of this chapter applies to operations under this section.

(j) Each person operating a provisionally certificated civil aircraft—

(1) May carry in that aircraft only persons who have a proper interest in the operations allowed by this section or who are specifically authorized by both the manufacturer and the Administrator; and

(2) Shall advise each person carried that the aircraft is provisionally certificated.

(k) The Administrator may prescribe additional limitations or procedures that the Administrator considers necessary, including limitations on the

**§ 91.319 Aircraft having experimental certificates: Operating limitations.**

(a) No person may operate an aircraft that has an experimental certificate—

(1) For other than the purpose for which the certificate was issued; or

(2) Carrying persons or property for compensation or hire.

(b) No person may operate an aircraft that has an experimental certificate outside of an area assigned by the Administrator until it is shown that—

(1) The aircraft is controllable throughout its normal range of speeds and throughout all the maneuvers to be executed; and

(2) The aircraft has no hazardous operating characteristics or design features.

(c) Unless otherwise authorized by the Administrator in special operating limitations, no person may operate an aircraft that has an experimental certificate over a densely populated area or in a congested airway. The Administrator may issue special operating limitations for particular aircraft to permit takeoffs and landings to be conducted over a densely populated area or in a congested airway, in accordance with terms and conditions specified in the authorization in the interest of safety in air commerce.

(d) Each person operating an aircraft that has an experimental certificate shall—

(1) Advise each person carried of the experimental nature of the aircraft;

(2) Operate under VFR, day only, unless otherwise specifically authorized by the Administrator; and

(3) Notify the control tower of the experimental nature of the aircraft when operating the aircraft into or out of airports with operating control towers.

(e) The Administrator may prescribe additional limitations that the Administrator considers necessary, including limitations on the persons that may be carried in the aircraft.

(Approved by the Office of Management and Budget under OMB control number 2120-0005).

carriage of a candidate in a Federal election, an agent of the candidate, or a person traveling on behalf of the candidate, if—

(1) That operator's primary business is not as an air carrier or commercial operator;

(2) The carriage is conducted under the rules of this part 91; and

(3) The payment for the carriage is required, and does not exceed the amount required to be paid, by regulations of the Federal Election Commission (11 CFR *et seq.*).

(b) For the purposes of this section, the terms "candidate" and "election" have the same meaning as that set forth in the regulations of the Federal Election Commission.

**§ 91.323 Increased maximum certificated weights for certain airplanes operated in Alaska.**

(a) Notwithstanding any other provision of the Federal Aviation Regulations, the Administrator will approve, as provided in this section, an increase in the maximum certificated weight of an airplane type certificated under Aeronautics Bulletin No. 7 A of the U.S. Department of Commerce dated January 1, 1931, as amended, or under the normal category of part 4a of the former Civil Air Regulations (14 CFR part 4a, 1964 ed.) if that airplane is operated in the State of Alaska by—

(1) [A certificate holder conducting operations under part 121 or part 135 of this chapter; or]

(2) The U.S. Department of Interior in conducting its game and fish law enforcement activities or its management, fire detection, and fire suppression activities concerning public lands.

(b) The maximum certificated weight approved under this section may not exceed—

(1) 12,500 pounds;

(2) 115 percent of the maximum weight listed in the FAA aircraft specifications;

(3) The weight at which the airplane meets the positive maneuvering load factor requirement for the normal category specified in § 23.337 of this chapter; or

(4) The weight at which the airplane meets the climb performance requirements under which it was type certificated.



ation limitations and is identified as the maximum weight authorized for operations within the State of Alaska.

[(Amdt. 91-253, Eff. 3/12/97)]

**[§ 91.325 Primary Category Aircraft: Operating limitations.]**

[(a) No person may operate a primary category aircraft carrying persons or property for compensation or hire.]

[(2) A designee of the pilot-owner, provided that the pilot-owner does not receive compensation for the use of the aircraft.]

[(Amdt. 91-230, Eff. 12/31/92)]

**§§ 91.327 — 91.399 [Reserved]**



# **Subpart E—Maintenance, Preventive Maintenance, and Alterations**

## **§ 91.401 Applicability.**

(a) This subpart prescribes rules governing the maintenance, preventive maintenance, and alterations of U.S.-registered civil aircraft operating within or outside of the United States.

(b) Sections 91.405, 91.409, 91.411, 91.417, and 91.419 of this subpart do not apply to an aircraft maintained in accordance with a continuous airworthiness maintenance program as provided in part 121, 127, 129, or 135.411(a)(2) of this chapter.

(c) Sections 91.405 and 91.409 of this part do not apply to an airplane inspected in accordance with part 125 of this chapter.

## **§ 91.403 General.**

(a) The owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an airworthy condition, including compliance with part 39 of this chapter.

(b) No person may perform maintenance, preventive maintenance, or alterations on an aircraft other than as prescribed in this subpart and other applicable regulations, including part 43 of this chapter.

(c) No person may operate an aircraft for which a manufacturer's maintenance manual or instructions for continued airworthiness has been issued that contains an airworthiness limitations section unless the mandatory replacement times, inspection intervals, and related procedures specified in that section or alternative inspection intervals and related procedures set forth in an operations specification approved by the Administrator under part 121, 127 or 135 of this chapter or in accordance with an inspection program approved under § 91.409(e) have been complied with.

## **§ 91.405 Maintenance required. Each owner or operator of an aircraft—**

(a) Shall have that aircraft inspected as prescribed in Subpart E of this part and shall between required inspections, except as provided in paragraph (c) of this section, have discrepancies repaired as prescribed in part 43 of this chapter;

(b) Shall ensure that maintenance personnel make appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service;

(c) Shall have any inoperative instrument or item of equipment, permitted to be inoperative by § 91.213(d)(2) of this part, repaired, replaced, removed, or inspected at the next required inspection; and

(d) When listed discrepancies include inoperative instruments or equipment, shall ensure that a placard has been installed as required by § 43.11 of this chapter.

## **§ 91.407 Operation after maintenance, preventive maintenance, rebuilding, or alteration.**

(a) No person may operate any aircraft that has undergone maintenance, preventive maintenance, rebuilding, or alteration unless—

(1) It has been approved for return to service by a person authorized under § 43.7 of this chapter; and

(2) The maintenance record entry required by § 43.9 or § 43.11, as applicable, of this chapter has been made.

(b) No person may carry any person (other than crewmembers) in an aircraft that has been maintained, rebuilt, or altered in a manner that may have appreciably changed its flight characteristics or substantially affected its operation in flight until an appropriately rated pilot with at least a private pilot certificate flies the aircraft, makes an operational check of the maintenance performed or alteration made, and logs the flight in the aircraft records.

(c) The aircraft does not have to be flown as required by paragraph (b) of this section if, prior to flight, ground tests, inspection, or both show conclusively that the maintenance, preventive maintenance, rebuilding, or alteration has not appreciably changed the flight characteristics or substantially affected the flight operation of the aircraft.

(Approved by the Office of Management and Budget under OMB control number 2120-0005).

part 15 of this chapter and has been approved for return to service by a person authorized by § 43.7 of this chapter; or

(2) An inspection for the issuance of an airworthiness certificate in accordance with part 21 of this chapter.

No inspection performed under paragraph (b) of this section may be substituted for any inspection required by this paragraph unless it is performed by a person authorized to perform annual inspections and is entered as an "annual" inspection in the required maintenance records.

(b) Except as provided in paragraph (c) of this section, no person may operate an aircraft carrying any person (other than a crewmember) for hire, and no person may give flight instruction for hire in an aircraft which that person provides, unless within the preceding 100 hours of time in service the aircraft has received an annual or 100-hour inspection and been approved for return to service in accordance with part 43 of this chapter or has received an inspection for the issuance of an airworthiness certificate in accordance with part 21 of this chapter. The 100-hour limitation may be exceeded by not more than 10 hours while en route to reach a place where the inspection can be done. The excess time used to reach a place where the inspection can be done must be included in computing the next 100 hours of time in service.

(c) Paragraphs (a) and (b) of this section do not apply to—

(1) An aircraft that carries a special flight permit, a current experimental certificate, or a provisional airworthiness certificate;

(2) An aircraft inspected in accordance with an approved aircraft inspection program under part 125, 127, or 135 of this chapter and so identified by the registration number in the operations specifications of the certificate holder having the approved inspection program;

(3) An aircraft subject to the requirements of paragraph (d) or (e) of this section; or

(4) Turbine-powered rotorcraft when the operator elects to inspect that rotorcraft in accordance with paragraph (e) of this section.

(d) *Progressive inspection.* Each registered owner or operator of an aircraft desiring to use a progressive inspection program must submit a written

(2) A current inspection procedures manual available and readily understandable to pilot and maintenance personnel containing, in detail—

(i) An explanation of the progressive inspection, including the continuity of inspection responsibility, the making of reports, and the keeping of records and technical reference material;

(ii) An inspection schedule, specifying the intervals in hours or days when routine and detailed inspections will be performed and including instructions for exceeding an inspection interval by not more than 10 hours while en route and for changing an inspection interval because of service experience;

(iii) Sample routine and detailed inspection forms and instructions for their use; and

(iv) Sample reports and records and instructions for their use;

(3) Enough housing and equipment for necessary disassembly and proper inspection of the aircraft; and

(4) Appropriate current technical information for the aircraft.

The frequency and detail of the progressive inspection shall provide for the complete inspection of the aircraft within each 12 calendar months and be consistent with the manufacturer's recommendations, field service experience, and the kind of operation in which the aircraft is engaged. The progressive inspection schedule must ensure that the aircraft, at all times, will be airworthy and will conform to all applicable FAA aircraft specifications, type certificate data sheets, airworthiness directives, and other approved data. If the progressive inspection is discontinued, the owner or operator shall immediately notify the local FAA Flight Standards district office, in writing, of the discontinuance. After the discontinuance, the first annual inspection under § 91.409(a)(1) is due within 12 calendar months after the last complete inspection of the aircraft under the progressive inspection. The 100-hour inspection under § 91.409(b) is due within 100 hours after that complete inspection. A complete inspection of the aircraft, for the purpose of determining when the annual and 100-hour inspections are due, requires a detailed inspection of the aircraft and all its com-

propeller-powered multiengine airplanes, and turbine-powered rotorcraft. No person may operate a large airplane, turbojet multiengine airplane, turbo-propeller-powered multiengine airplane, or turbine-powered rotorcraft unless the replacement times for life-limited parts specified in the aircraft specifications, type data sheets, or other documents approved by the Administrator are complied with and the airplane or turbine-powered rotorcraft, including the airframe, engines, propellers, rotors, appliances, survival equipment, and emergency equipment, is inspected in accordance with an inspection program selected under the provisions of paragraph (f) of this section, except that, the owner or operator of a turbine-powered rotorcraft may elect to use the inspection provisions of § 91.409(a), (b), (c), or (d) in lieu of an inspection option of § 91.409(f).

(f) *Selection of inspection program under paragraph (e) of this section.* The registered owner or operator of each airplane or turbine-powered rotorcraft described in paragraph (e) of this section must select, identify in the aircraft maintenance records, and use one of the following programs for the inspection of the aircraft:

(1) A continuous airworthiness inspection program that is part of a continuous airworthiness maintenance program currently in use by a person holding an air carrier operating certificate or an operating certificate issued under part 121, 127, or 135 of this chapter and operating that make and model aircraft under part 121 of this chapter or operating that make and model under part 135 of this chapter and maintaining it under § 135.411(a)(2) of this chapter.

(2) An approved aircraft inspection program approved under § 135.419 of this chapter and currently in use by a person holding an operating certificate issued under part 135 of this chapter.

(3) A current inspection program recommended by the manufacturer.

(4) Any other inspection program established by the registered owner or operator of that airplane or turbine-powered rotorcraft and approved by the Administrator under paragraph (g) of this section. However, the Administrator may require revision of this inspection program in accordance with the provisions of § 91.415.

Each operator shall include in the selected program the name and address of the person respon-

sible for establishing or changing an approved inspection program under paragraph (f)(4) of this section must submit the program for approval to the local FAA Flight Standards district office having jurisdiction over the area in which the aircraft is based. The program must be in writing and include at least the following information:

(1) Instructions and procedures for the conduct of inspections for the particular make and model airplane or turbine-powered rotorcraft, including necessary tests and checks. The instructions and procedures must set forth in detail the parts and areas of the airframe, engines, propellers, rotors, and appliances, including survival and emergency equipment required to be inspected.

(2) A schedule for performing the inspections that must be performed under the program expressed in terms of the time in service, calendar time, number of system operations, or any combination of these.

(h) *Changes from one inspection program to another.* When an operator changes from one inspection program under paragraph (f) of this section to another, the time in service, calendar times, or cycles of operation accumulated under the previous program must be applied in determining inspection due times under the new program.

(Approved by the Office of Management and Budget under OMB control number 2120-0005).

#### **§ 91.411 Altimeter system and altitude reporting equipment tests and inspections.**

(a) No person may operate an airplane, or helicopter, in controlled airspace under IFR unless—

(1) Within the preceding 24 calendar months, each static pressure system, each altimeter instrument, and each automatic pressure altitude reporting system has been tested and inspected and found to comply with appendix E of part 43 of this chapter;

(2) Except for the use of system drain and alternate static pressure valves, following any opening and closing of the static pressure system, that system has been tested and inspected and found to comply with paragraph (a), appendices E and F, of part 43 and of this chapter; and

E, or part 43 of this chapter.

(b) The tests required by paragraph (a) of this section must be conducted by—

(1) The manufacturer of the airplane, or helicopter, on which the tests and inspections are to be performed;

(2) A certificated repair station properly equipped to perform those functions and holding—

(i) An instrument rating, Class I;

(ii) A limited instrument rating appropriate to the make and model of appliance to be tested;

(iii) A limited rating appropriate to the test to be performed;

(iv) An airframe rating appropriate to the airplane, or helicopter, to be tested; or

(v) A limited rating for a manufacturer issued for the appliance in accordance with § 145.101(b)(4) of this chapter; or

(3) A certificated mechanic with an airframe rating (static pressure system tests and inspections only).

(c) Altimeter and altitude reporting equipment approved under Technical Standard Orders are considered to be tested and inspected as of the date of their manufacture.

(d) No person may operate an airplane, or helicopter, in controlled airspace under IFR at an altitude above the maximum altitude at which all altimeters and the automatic altitude reporting system of that airplane, or helicopter, have been tested.

#### **§91.413 ATC transponder tests and inspections.**

(a) No persons may use an ATC transponder that is specified in § 91.215(a), § 121.345(c), § 127.123(b), or § 135.143(c) of this chapter unless, within the preceding 24 calendar months, the ATC transponder has been tested and inspected and found to comply with appendix F of part 43 of this chapter; and

(b) Following any installation or maintenance on an ATC transponder where data correspondence error could be introduced, the integrated system has been tested, inspected, and found to comply with paragraph (c), appendix E, of part 43 of this chapter.

(ii) A limited radio rating appropriate to the make and model transponder to be tested;

(iii) A limited rating appropriate to the test to be performed;

(iv) A limited rating for a manufacturer issued for the transponder in accordance with § 145.101(b)(4) of this chapter; or

(2) A holder of a continuous airworthiness maintenance program as provided in part 121, 127 or § 135.411(a)(2) of this chapter; or

(3) The manufacturer of the aircraft on which the transponder to be tested is installed, if the transponder was installed by that manufacturer.

#### **§91.415 Changes to aircraft inspection programs.**

(a) Whenever the Administrator finds that revisions to an approved aircraft inspection program under § 91.409(f)(4) are necessary for the continued adequacy of the program, the owner or operator shall, after notification by the Administrator, make any changes in the program found to be necessary by the Administrator.

(b) The owner or operator may petition the Administrator to reconsider the notice to make any changes in a program in accordance with paragraph (a) of this section.

(c) The petition must be filed with the FAA Flight Standards district office which requested the change to the program within 30 days after the certificate holder receives the notice.

(d) Except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notice pending a decision by the Administrator.

#### **§91.417 Maintenance records.**

(a) Except for work performed in accordance with § 91.411 and § 91.413, each registered owner or operator shall keep the following records for the periods specified in paragraph (b) of this section:

(1) Records of the maintenance, preventive maintenance, and alteration and records of the 100-hour, annual, progressive, and other required or approved inspections, as appropriate, for each aircraft (including the airframe) and each engine,

formed; and

(iii) The signature, and certificate number of the person approving the aircraft for return to service.

(2) Records containing the following information:

(i) The total time in service of the airframe, each engine, each propeller, and each rotor.

(ii) The current status of life-limited parts of each airframe, engine, propeller, rotor, and appliance.

(iii) The time since last overhaul of all items installed on the aircraft which are required to be overhauled on a specified time basis.

(iv) The current inspection status of the aircraft, including the time since the last inspection required by the inspection program under which the aircraft and its appliances are maintained.

(v) The current status of applicable airworthiness directives (AD) including, for each, the method of compliance, the AD number, and revision date. If the AD involves recurring action, the time and date when the next action is required.

(vi) Copies of the forms prescribed by § 43.9(a) of this chapter for each major alteration to the airframe and currently installed engines, rotors, propellers, and appliances.

(b) The owner or operator shall retain the following records for the periods prescribed:

(1) The records specified in paragraph (a)(1) of this section shall be retained until the work is repeated or superseded by other work or for 1 year after the work is performed.

(2) The records specified in paragraph (a)(2) of this section shall be retained and transferred with the aircraft at the time the aircraft is sold.

(3) A list of defects furnished to a registered owner or operator under § 43.11 of this chapter shall be retained until the defects are repaired and the aircraft is approved for return to service.

(c) The owner or operator shall make all maintenance records required to be kept by this section available for inspection by the Administrator or any authorized representative of the National Transportation Safety Board (NTSB). In addition, the owner or operator shall present Form 337 described in

aircraft by the owner or operator.

(Approved by the Office of Management and Budget under OMB control number 2120-0005).

#### **§ 91.419 Transfer of maintenance records.**

Any owner or operator who sells a U.S.-registered aircraft shall transfer to the purchaser, at the time of sale, the following records of that aircraft, in plain language form or in coded form at the election of the purchaser, if the coded form provides for the preservation and retrieval of information in a manner acceptable to the Administrator:

(a) The records specified in § 91.417(a)(2).

(b) The records specified in § 91.417(a)(1) which are not included in the records covered by paragraph (a) of this section, except that the purchaser may permit the seller to keep physical custody of such records. However, custody of records by the seller does not relieve the purchaser of the responsibility under § 91.417(c) to make the records available for inspection by the Administrator or any authorized representative of the National Transportation Safety Board (NTSB).

#### **§ 91.421 Rebuilt engine maintenance records.**

(a) The owner or operator may use a new maintenance record, without previous operating history, for an aircraft engine rebuilt by the manufacturer or by an agency approved by the manufacturer.

(b) Each manufacturer or agency that grants zero time to an engine rebuilt by it shall enter in the new record—

(1) A signed statement of the date the engine was rebuilt;

(2) Each change made as required by airworthiness directives; and

(3) Each change made in compliance with manufacturer's service bulletins, if the entry is specifically requested in that bulletin.

(c) For the purposes of this section, a rebuilt engine is a used engine that has been completely disassembled, inspected, repaired as necessary, reassembled, tested, and approved in the same manner and to the same tolerances and limits as a new engine with either new or used parts. However, all parts used in it must conform to the production





# Subpart F—Large and Turbine-Powered Multiengine Airplanes

## § 91.501 Applicability.

(a) This subpart prescribes operating rules, in addition to those prescribed in other subparts of this part, governing the operation of large and of turbojet-powered multiengine civil airplanes of U.S. registry. The operating rules in this subpart do not apply to those airplanes when they are required to be operated under parts 121, 125, 129, 135, and 137 of this chapter. (Section § 91.409 prescribes an inspection program for large and for turbine-powered (turbojet and turboprop) multiengine airplanes of U.S. registry when they are operated under this part or part 129 or 137.)

(b) Operations that may be conducted under the rules in this subpart instead of those in parts 121, 129, 135, and 137 of this chapter when common carriage is not involved, include—

- (1) Ferry or training flights;
- (2) Aerial work operations such as aerial photography or survey, or pipeline patrol, but not including fire fighting operations;
- (3) Flights for the demonstration of an airplane to prospective customers when no charge is made except for those specified in paragraph (d) of this section;
- (4) Flights conducted by the operator of an airplane for his personal transportation, or the transportation of his guests when no charge, assessment, or fee is made for the transportation;
- (5) Carriage of officials, employees, guests, and property of a company on an airplane operated by that company, or the parent or a subsidiary of the company or a subsidiary of the parent, when the carriage is within the scope of, and incidental to, the business of the company (other than transportation by air) and no charge, assessment or fee is made for the carriage in excess of the cost of owning, operating, and maintaining the airplane, except that no charge of any kind may be made for the carriage of a guest of a company, when the carriage is not within the scope of, and incidental to, the business of that company;
- (6) The carriage of company officials, employees, and guests of the company on an airplane operated under a time sharing, interchange, or

joint ownership agreement as defined in paragraph (c) of this section;

(7) The carriage of property (other than mail) on an airplane operated by a person in the furtherance of a business or employment (other than transportation by air) when the carriage is within the scope of, and incidental to, that business or employment and no charge, assessment, or fee is made for the carriage other than those specified in paragraph (d) of this section;

(8) The carriage on an airplane of an athletic team, sports group, choral group, or similar group having a common purpose or objective when there is no charge, assessment, or fee of any kind made by any person for that carriage; and

(9) The carriage of persons on an airplane operated by a person in the furtherance of a business other than transportation by air for the purpose of selling them land, goods, or property, including franchises or distributorships, when the carriage is within the scope of, and incidental to, that business and no charge, assessment, or fee is made for that carriage.

(c) As used in this section—

(1) A “time sharing agreement” means an arrangement whereby a person leases his airplane with flight crew to another person, and no charge is made for the flights conducted under that arrangement other than those specified in paragraph (d) of this section;

(2) An “interchange agreement” means an arrangement whereby a person leases his airplane to another person in exchange for equal time, when needed, on the other person’s airplane, and no charge, assessment, or fee is made, except that a charge may be made not to exceed the difference between the cost of owning, operating, and maintaining the two airplanes;

(3) A “joint ownership agreement” means an arrangement whereby one of the registered joint owners of an airplane employs and furnishes the flight crew for that airplane and each of the registered joint owners pays a share of the charge specified in the agreement.

(d) The following may be charged, as expenses of a specific flight, for transportation as authorized

(3) Hangar and tie-down costs away from the aircraft's base of operation.

(4) Insurance obtained for the specific flight.

(5) Landing fees, airport taxes, and similar assessments.

(6) Customs, foreign permit, and similar fees directly related to the flight.

(7) In flight food and beverages.

(8) Passenger ground transportation.

(9) Flight planning and weather contract services.

(10) An additional charge equal to 100 percent of the expenses listed in paragraph (d)(1) of this section.

#### **§ 91.503 Flying equipment and operating information.**

(a) The pilot in command of an airplane shall ensure that the following flying equipment and aeronautical charts and data, in current and appropriate form, are accessible for each flight at the pilot station of the airplane:

(1) A flashlight having at least two size "D" cells, or the equivalent, that is in good working order.

(2) A cockpit checklist containing the procedures required by paragraph (b) of this section.

(3) Pertinent aeronautical charts.

(4) For IFR, VFR over-the-top, or night operations, each pertinent navigational en route, terminal area, and approach and letdown chart.

(5) In the case of multiengine airplanes, one-engine inoperative climb performance data.

(b) Each cockpit checklist must contain the following procedures and shall be used by the flight crewmembers when operating the airplane:

(1) Before starting engines.

(2) Before takeoff.

(3) Cruise.

(4) Before landing.

(5) After landing.

(6) Stopping engines.

(7) Emergencies.

(c) Each emergency cockpit checklist procedure required by paragraph (b)(7) of this section must contain the following procedures, as appropriate:

(4) Any other procedures necessary for safety.

(d) The equipment, charts, and data prescribed in this section shall be used by the pilot in command and other members of the flight crew, when pertinent.

#### **§ 91.505 Familiarity with operating limitations and emergency equipment.**

(a) Each pilot in command of an airplane shall, before beginning a flight, become familiar with the Airplane Flight Manual for that airplane, if one is required, and with any placards, listings, instrument markings, or any combination thereof, containing each operating limitation prescribed for that airplane by the Administrator, including those specified in § 91.9(b).

(b) Each required member of the crew shall, before beginning a flight, become familiar with the emergency equipment installed on the airplane to which that crewmember is assigned and with the procedures to be followed for the use of that equipment in an emergency situation.

#### **§ 91.507 Equipment requirements: Over-the-top or night VFR operations.**

No person may operate an airplane over-the-top or at night under VFR unless that airplane is equipped with the instruments and equipment required for IFR operations under § 91.205(d) and one electric landing light for night operations. Each required instrument and item of equipment must be in operable condition.

#### **§ 91.509 Survival equipment for overwater operations.**

(a) No person may take off an airplane for a flight over water more than 50 nautical miles from the nearest shore unless that airplane is equipped with a life preserver or an approved flotation means for each occupant of the airplane.

(b) No person may take off an airplane for a flight over water more than 30 minutes flying time or 100 nautical miles from the nearest shore unless it has on board the following survival equipment:

(1) A life preserver, equipped with an approved survivor locator light, for each occupant of the airplane.

for each liferaft.

(4) One self-buoyant, water-resistant, portable emergency radio signaling device that is capable of transmission on the appropriate emergency frequency or frequencies and not dependent upon the airplane power supply.

(5) A lifeline stored in accordance with § 25.1411(g) of this chapter.

(c) The required liferafts, life preservers, and signaling devices must be installed in conspicuously marked locations and easily accessible in the event of a ditching without appreciable time for preparatory procedures.

(d) A survival kit, appropriately equipped for the route to be flown, must be attached to each required liferaft.

(e) As used in this section, the term shore means that area of the land adjacent to the water which is above the high water mark and excludes land areas which are intermittently under water.

#### **§ 91.511 Radio equipment for overwater operations.**

(a) [Except as provided in paragraphs (c), (d), and (f) of this section,] no person may take off an airplane for a flight over water more than 30 minutes flying time or 100 nautical miles from the nearest shore unless it has at least the following operable equipment:

(1) Radio communication equipment appropriate to the facilities to be used and able to transmit to, and receive from, any place on the route, at least one surface facility:

(i) Two transmitters.

(ii) Two microphones.

(iii) Two headsets or one headset and one speaker.

(iv) Two independent receivers.

(2) Appropriate electronic navigational equipment consisting of at least two independent electronic navigation units capable of providing the pilot with the information necessary to navigate the airplane within the airspace assigned by air traffic control. However, a receiver that can receive both communications and required navigational signals may be used in place of a separate communications receiver and a separate navigational signal receiver or unit.

tion unit.

(c) Notwithstanding the provisions of paragraph (a) of this section, a person may operate an airplane on which no passengers are carried from a place where repairs or replacement cannot be made to a place where they can be made, if not more than one of each of the dual items of radio communication and navigational equipment specified in paragraphs (a)(1)(i) through (iv) and (a)(2) of this section malfunctions or becomes inoperative.

(d) Notwithstanding the provisions of paragraph (a) of this section, when both VHF and HF communications equipment are required for the route and the airplane has two VHF transmitters and two VHF receivers for communications, only one HF transmitter and one HF receiver is required for communications.

(e) As used in this section, the term "shore" means that area of the land adjacent to the water which is above the high-water mark and excludes land areas which are intermittently under water.

[(f) Notwithstanding the requirements in paragraph (a)(2) of this section, a person may operate in the Gulf of Mexico, the Caribbean Sea, and the Atlantic Ocean west of a line which extends from 44°47'00"N / 67°00'00"W to 39°00'00"N / 67°00'00"W to 38°30'00"N / 60°00'00"W south along the 60°00'00"W longitude line to the point where the line intersects with the northern coast of South America, when—

[(1) A single long-range navigation system is installed, operational, and appropriate for the route; and

[(2) Flight conditions and the aircraft's capabilities are such that no more than a 30-minute gap in two-way radio very high frequency communications is expected to exist.]]

[(Amdt. 91-249, Eff. 2/26/96)]

#### **§ 91.513 Emergency equipment.**

(a) No person may operate an airplane unless it is equipped with the emergency equipment listed in this section.

(b) Each item of equipment—

(1) Must be inspected in accordance with § 91.409 to ensure its continued serviceability and immediate readiness for its intended purposes;

(2) Must be readily accessible to the crew;

(c) Hand fire extinguishers must be provided for use in crew, passenger, and cargo compartments in accordance with the following:

(1) The type and quantity of extinguishing agent must be suitable for the kinds of fires likely to occur in the compartment where the extinguisher is intended to be used.

(2) At least one hand fire extinguisher must be provided and located on or near the flight deck in a place that is readily accessible to the flight crew.

(3) At least one hand fire extinguisher must be conveniently located in the passenger compartment of each airplane accommodating more than six but less than 31 passengers, and at least two hand fire extinguishers must be conveniently located in the passenger compartment of each airplane accommodating more than 30 passengers.

(4) Hand fire extinguishers must be installed and secured in such a manner that they will not interfere with the safe operation of the airplane or adversely affect the safety of the crew and passengers. They must be readily accessible and, unless the locations of the fire extinguishers are obvious, their stowage provisions must be properly identified.

(d) First aid kits for treatment of injuries likely to occur in flight or in minor accidents must be provided.

(e) Each airplane accommodating more than 19 passengers must be equipped with a crash axe.

(f) Each passenger-carrying airplane must have a portable battery-powered megaphone or megaphones readily accessible to the crewmembers assigned to direct emergency evacuation, installed as follows:

(1) One megaphone on each airplane with a seating capacity of more than 60 but less than 100 passengers, at the most rearward location in the passenger cabin where it would be readily accessible to a normal flight attendant seat. However, the Administrator may grant a deviation from the requirements of this subparagraph if the Administrator finds that a different location would be more useful for evacuation of persons during an emergency.

(2) On each airplane with a seating capacity of 100 or more passengers, one megaphone

#### **§91.515 Flight altitude rules.**

(a) Notwithstanding § 91.119, and except as provided in paragraph (b) of this section, no person may operate an airplane under VFR at less than—

(1) One thousand feet above the surface, or 1,000 feet from any mountain, hill, or other obstruction to flight, for day operations; and

(2) The altitudes prescribed in § 91.177, for night operations.

(b) This section does not apply—

(1) During takeoff or landing;

(2) When a different altitude is authorized by a waiver to this section under subpart J of this part; or

(3) When a flight is conducted under the special VFR weather minimums of § 91.157 with an appropriate clearance from ATC.

#### **§ 91.517 [Passenger information.]**

[(a) Except as provided in paragraph (b) of this section, no person may operate an airplane carrying passengers unless it is equipped with signs that are visible to passengers and flight attendants to notify them when smoking is prohibited and when safety belts must be fastened. The signs must be so constructed that the crew can turn them on and off. They must be turned on during airplane movement on the surface, for each takeoff, for each landing, and when otherwise considered to be necessary by the pilot in command.]

[(b) The pilot in command of an airplane that is not required, in accordance with applicable aircraft and equipment requirements of this chapter, to be equipped as provided in paragraph (a) of this section shall ensure that the passengers are notified orally each time that it is necessary to fasten their safety belts and when smoking is prohibited.]

[(c) If passenger information signs are installed, no passenger or crewmember may smoke while any "no smoking" sign is lighted nor may any passenger or crewmember smoke in any lavatory.]

[(d) Each passenger required by § 91.107(a)(3) to occupy a seat or berth shall fasten his or her safety belt about him or her and keep it fastened while any "fasten seat belt" sign is lighted.]

[(e) Each passenger shall comply with instructions given him or her by crewmembers regarding

(a) Before each takeoff the pilot in command of an airplane carrying passengers shall ensure that all passengers have been orally briefed on—

(1) **Smoking:** Each passenger shall be briefed on when, where, and under what condition smoking is prohibited. This briefing shall include a statement, as appropriate, that the Federal Aviation Regulations require passenger compliance with lighted passenger information signs and no smoking placards, prohibit smoking in lavatories, and require compliance with crewmember instructions with regard to these items;

(2) **Use of safety belts and shoulder harnesses:** Each passenger shall be briefed on when, where, and under what conditions it is necessary to have his or her safety belt and, if installed, his or her shoulder harness fastened about him or her. This briefing shall include a statement, as appropriate, that Federal Aviation Regulations require passenger compliance with the lighted passenger sign and/or crewmember instructions with regard to these items;】

(3) Location and means for opening the passenger entry door and emergency exits;

(4) Location of survival equipment;

(5) Ditching procedures and the use of flotation equipment required under § 91.509 for a flight over water; and

(6) The normal and emergency use of oxygen equipment installed on the airplane.

(b) The oral briefing required by paragraph (a) of this section shall be given by the pilot in command or a member of the crew, but need not be given when the pilot in command determines that the passengers are familiar with the contents of the briefing. It may be supplemented by printed cards for the use of each passenger containing—

(1) A diagram of, and methods of operating, the emergency exits; and

(2) Other instructions necessary for use of emergency equipment.

(c) Each card used under paragraph (b) must be carried in convenient locations on the airplane for the use of each passenger and must contain information that is pertinent only to the type and model airplane on which it is used.

【(Amdt. 91-231, Eff. 10/15/92)】

der harness that meets the applicable requirements specified in § 25.785 of this chapter, except that—

(1) Shoulder harnesses and combined safety belt and shoulder harnesses that were approved and installed before March 6, 1980, may continue to be used; and

(2) Safety belt and shoulder harness restraint systems may be designed to the inertia load factors established under the certification basis of the airplane.

(b) No person may operate a transport category airplane unless it is equipped at each required flight attendant seat in the passenger compartment with a combined safety belt and shoulder harness that meets the applicable requirements specified in § 25.785 of this chapter, except that—

(1) Shoulder harnesses and combined safety belt and shoulder harnesses that were approved and installed before March 6, 1980, may continue to be used; and

(2) Safety belt and shoulder harness restraint systems may be designed to the inertia load factors established under the certification basis of the airplane.

#### **§ 91.523 Carry-on baggage.**

No pilot in command of an airplane having a seating capacity of more than 19 passengers may permit a passenger to stow baggage aboard that airplane except—

(a) In a suitable baggage or cargo storage compartment, or as provided in § 91.525; or

(b) Under a passenger seat in such a way that it will not slide forward under crash impacts severe enough to induce the ultimate inertia forces specified in § 25.561(b)(3) of this chapter, or the requirements of the regulations under which the airplane was type certificated. Restraining devices must also limit sideward motion of under-seat baggage and be designed to withstand crash impacts severe enough to induce sideward forces specified in § 25.561(b)(3) of this chapter.

#### **§ 91.525 Carriage of cargo.**

(a) No pilot in command may permit cargo to be carried in any airplane unless—

(1) It is carried in an approved cargo rack, bin, or compartment installed in the airplane;

eliminate the possibility of shifting under all normally anticipated flight and ground conditions.

(ii) It is packaged or covered to avoid possible injury to passengers.

(iii) It does not impose any load on seats or on the floor structure that exceeds the load limitation for those components.

(iv) It is not located in a position that restricts the access to or use of any required emergency or regular exit, or the use of the aisle between the crew and the passenger compartment.

(v) It is not carried directly above seated passengers.

(b) When cargo is carried in cargo compartments that are designed to require the physical entry of a crewmember to extinguish any fire that may occur during flight, the cargo must be loaded so as to allow a crewmember to effectively reach all parts of the compartment with the contents of a hand fire extinguisher.

#### **§91.527 Operating in icing conditions.**

(a) No pilot may take off an airplane that has—

(1) Frost, snow, or ice adhering to any propeller, windshield, or powerplant installation or to an airspeed, altimeter, rate of climb, or flight attitude instrument system;

(2) Snow or ice adhering to the wings or stabilizing or control surfaces; or

(3) Any frost adhering to the wings or stabilizing or control surfaces, unless that frost has been polished to make it smooth.

(b) Except for an airplane that has ice protection provisions that meet the requirements in section 34 of Special Federal Aviation Regulation No. 23, or those for transport category airplane type certification, no pilot may fly—

(1) Under IFR into known or forecast moderate icing conditions; or

(2) Under VFR into known light or moderate icing conditions unless the aircraft has functioning de-icing or anti-icing equipment protecting each propeller, windshield, wing, stabilizing or control surface, and each airspeed, altimeter, rate of climb, or flight attitude instrument system.

(d) If current weather reports and briefing information relied upon by the pilot in command indicate that the forecast icing conditions that would otherwise prohibit the flight will not be encountered during the flight because of changed weather conditions since the forecast, the restrictions in paragraphs (b) and (c) of this section based on forecast conditions do not apply.

#### **§91.529 Flight engineer requirements.**

(a) No person may operate the following airplanes without a flight crewmember holding a current flight engineer certificate:

(1) An airplane for which a type certificate was issued before January 2, 1964, having a maximum certificated takeoff weight of more than 80,000 pounds.

(2) An airplane type certificated after January 1, 1964, for which a flight engineer is required by the type certification requirements.

(b) No person may serve as a required flight engineer on an airplane unless, within the preceding 6 calendar months, that person has had at least 50 hours of flight time as a flight engineer on that type airplane or has been checked by the Administrator on that type airplane and is found to be familiar and competent with all essential current information and operating procedures.

#### **§91.531 Second in command requirements.**

(a) Except as provided in paragraph (b) of this section, no person may operate the following airplanes without a pilot who is designated as second in command of that airplane:

(1) A large airplane, except that a person may operate an airplane certificated under SFAR 41 without a pilot who is designated as second in command if that airplane is certificated for operation with one pilot.

(2) A turbojet-powered multiengine airplane for which two pilots are required under the type certification requirements for that airplane.

(3) A commuter category airplane, except that a person may operate a commuter category airplane notwithstanding paragraph (a)(1) of this section, that has a passenger seating configuration, excluding pilot seats, of nine or less without a pilot who is designated as second in command

and type certificated with only one pilot station. The authorization contains any conditions that the Administrator finds necessary for safe operation.

(c) No person may designate a pilot to serve as second in command, nor may any pilot serve as second in command, of an airplane required under this section to have two pilots unless that pilot meets the qualifications for second in command prescribed in § 61.55 of this chapter.

#### **§91.533 Flight attendant requirements.**

(a) No person may operate an airplane unless at least the following number of flight attendants are on board the airplane:

(1) For airplanes having more than 19 but less than 51 passengers on board, one flight attendant.

(2) For airplanes having more than 50 but less than 101 passengers on board, two flight attendants.

(3) For airplanes having more than 100 passengers on board, two flight attendants plus one additional flight attendant for each unit (or part of a unit) of 50 passengers above 100.

(b) No person may serve as a flight attendant on an airplane when required by paragraph (a) of this section unless that person has demonstrated to the pilot in command familiarity with the nec-

cesses of stowage of food, beverage, and passenger service equipment during aircraft movement on the surface, take-off, and landing.

[(a) No operator may move an aircraft on the surface, take off, or land when any food, beverage, or tableware furnished by the operator is located at any passenger seat.

[(b) No operator may move an aircraft on the surface, takeoff, or land unless each food and beverage tray and seat back tray table is secured in its stowed position.

[(c) No operator may permit an aircraft to move on the surface, take off, or land unless each passenger serving cart is secured in its stowed position.

[(d) No operator may permit an aircraft to move on the surface, take off, or land unless each movie screen that extends into the aisle is stowed.

[(e) Each passenger shall comply with instructions given by a crewmember with regard to compliance with this section.]

[(Amdt. 91-231, Eff. 10/15/92)]

**§§ 91.537**

**— 91.599 [Reserved]**





# Large and Transport Category Aircraft

## § 91.601 Applicability.

This subpart applies to operation of large and transport category U.S.-registered civil aircraft.

## § 91.603 Aural speed warning device.

No person may operate a transport category airplane in air commerce unless that airplane is equipped with an aural speed warning device that complies with § 25.1303(c)(1).

## § 91.605 Transport category civil airplane weight limitations.

(a) No person may take off any transport category airplane (other than a turbine-engine-powered airplane certificated after September 30, 1958) unless—

(1) The takeoff weight does not exceed the authorized maximum takeoff weight for the elevation of the airport of takeoff;

(2) The elevation of the airport of takeoff is within the altitude range for which maximum takeoff weights have been determined;

(3) Normal consumption of fuel and oil in flight to the airport of intended landing will leave a weight on arrival not in excess of the authorized maximum landing weight for the elevation of that airport; and

(4) The elevations of the airport of intended landing and of all specified alternate airports are within the altitude range for which the maximum landing weights have been determined.

(b) No person may operate a turbine-engine-powered transport category airplane certificated after September 30, 1958, contrary to the Airplane Flight Manual, or take off that airplane unless—

(1) The takeoff weight does not exceed the takeoff weight specified in the Airplane Flight Manual for the elevation of the airport and for the ambient temperature existing at the time of takeoff;

(2) Normal consumption of fuel and oil in flight to the airport of intended landing and to the alternate airports will leave a weight on

arrival not in excess of the landing weight specified in the Airplane Flight Manual for the elevation of each of the airports involved and for the ambient temperatures expected at the time of landing;

(3) The takeoff weight does not exceed the weight shown in the Airplane Flight Manual to correspond with the minimum distances required for takeoff considering the elevation of the airport, the runway to be used, the effective runway gradient, and the ambient temperature and wind component existing at the time of takeoff; and

(4) Where the takeoff distance includes a clearway, the clearway distance is not greater than one-half of—

(i) The takeoff run, in the case of airplanes certificated after September 30, 1958, and before August 30, 1959; or

(ii) The runway length, in the case of airplanes certificated after August 29, 1959.

(c) No person may take off a turbine-engine-powered transport category airplane certificated after August 29, 1959, unless, in addition to the requirements of paragraph (b) of this section—

(1) The accelerate-stop distance is no greater than the length of the runway plus the length of the stopway (if present); and

(2) The takeoff distance is no greater than the length of the runway plus the length of the clearway (if present); and

(3) The takeoff run is no greater than the length of the runway.

## § 91.607 Emergency exits for airplanes carrying passengers for hire.

(a) Notwithstanding any other provision of this chapter, no person may operate a large airplane (type certificated under the Civil Air Regulations effective before April 9, 1957) in passenger-carrying operations for hire, with more than the number of occupants—

(1) Allowed under Civil Air Regulations 4b.362 (a), (b), and (c) as in effect on December 20, 1951; or

exits and doors) approved for the emergency exit of passengers or with an occupant-exit configuration approved under paragraph (b) or (c) of this section.

Airplane type	Maximum number of occupants including all crewmembers	Corresponding number of exits authorized for passenger use
B-307 .....	61	4
B-377 .....	96	9
C-46 .....	67	4
CV-240 .....	53	6
CV-340 AND CV-440.	53	6
DC-3 .....	35	4
DC-3 (Super) .....	39	5
DC-4 .....	86	5
DC-6 .....	87	7
DC-6B .....	112	11
L-18 .....	17	3
L-049, L-649, L-749.	87	7
L-1049 .....	96	9
M-202 .....	53	6
M-404 .....	53	7
Viscount 700 Series.	53	7

(b) Occupants in addition to those authorized under paragraph (a) of this section may be carried as follows:

(1) For each additional floor-level exit at least 24 inches wide by 48 inches high, with an unobstructed 20-inch-wide access aisleway between the exit and the main passenger aisle, 12 additional occupants.

(2) For each additional window exit located over a wing that meets the requirements of the airworthiness standards under which the airplane was type certificated or that is large enough to inscribe an ellipse 19 x 26 inches, eight additional occupants.

(3) For each additional window exit that is not located over a wing but that otherwise complies with paragraph (b)(2) of this section, five additional occupants.

(4) For each airplane having a ratio (as computed from the table in paragraph (a) of this

located in the rear part of the cabin on the opposite side of the fuselage from the main entrance door. However, no person may operate an airplane under this section carrying more than 115 occupants unless there is such an exit on each side of the fuselage in the rear part of the cabin.

(c) No person may eliminate any approved exit except in accordance with the following:

(1) The previously authorized maximum number of occupants must be reduced by the same number of additional occupants authorized for that exit under this section.

(2) Exits must be eliminated in accordance with the following priority schedule: First, non-over-wing window exits; second, over-wing window exits; third, floor-level exits located in the forward part of the cabin; and fourth, floor-level exits located in the rear of the cabin.

(3) At least one exit must be retained on each side of the fuselage regardless of the number of occupants.

(4) No person may remove any exit that would result in a ratio of maximum number of occupants to approved exits greater than 14:1.

(d) This section does not relieve any person operating under part 121 of this chapter from complying with § 121.291.

#### **§ 91.609 Flight recorders and cockpit voice recorders.**

(a) No holder of an air carrier operating certificate or an operating certificate may conduct any operation under this part with an aircraft listed in the holder's operations specifications or current list of aircraft used in air transportation unless that aircraft complies with any applicable flight recorder and cockpit voice recorder requirements of the part under which its certificate is issued except that the operator may—

(1) Ferry an aircraft with an inoperative flight recorder or cockpit voice recorder from a place where repair or replacement cannot be made to a place where they can be made;

(2) Continue a flight as originally planned, if the flight recorder or cockpit voice recorder becomes inoperative after the aircraft has taken off;

where the flight recorder or cockpit voice recorder is to be installed.

(b) [Notwithstanding paragraphs (c) and (e) of this section, an operator other than the holder of an air carrier or a commercial operator certificate may—

[(1) Ferry an aircraft with an inoperative flight recorder or cockpit voice recorder from a place where repair or replacement cannot be made to a place where they can be made;

[(2) Continue a flight as originally planned if the flight recorder or cockpit voice recorder becomes inoperative after the aircraft has taken off;

[(3) Conduct an airworthiness flight test during which the flight recorder or cockpit voice recorder is turned off to test it or to test any communications or electrical equipment installed in the aircraft;

[(4) Ferry a newly acquired aircraft from a place where possession of it was taken to a place where the flight recorder or cockpit voice recorder is to be installed; or

[(5) Operate an aircraft:

[(i) For not more than 15 days while the flight recorder and/or cockpit voice recorder is inoperative and/or removed for repair provided that the aircraft maintenance records contain an entry that indicates the date of failure, and a placard is located in view of the pilot to show that the flight recorder or cockpit voice recorder is inoperative.

[(ii) For not more than an additional 15 days, provided that the requirements in paragraph (b)(5)(i) are met and that a certificated pilot, or a certificated person authorized to return an aircraft to service under § 43.7 of this chapter, certifies in the aircraft maintenance records that additional time is required to complete repairs or obtain a replacement unit.]

(c) No person may operate a U.S. civil registered, multiengine, turbine-powered airplane or rotorcraft having a passenger seating configuration, excluding any pilot seats of 10 or more that has been manufactured after October 11, 1991, unless it is

accuracy, and recording interval specified, and that are capable of retaining no less than 8 hours of aircraft operation.

(d) Whenever a flight recorder, required by this section, is installed, it must be operated continuously from the instant the airplane begins the take-off roll or the rotorcraft begins lift-off until the airplane has completed the landing roll or the rotorcraft has landed at its destination.

(e) Unless otherwise authorized by the Administrator, after October 11, 1991, no person may operate a U.S. civil registered multiengine, turbine-powered airplane or rotorcraft having a passenger seating configuration of six passengers or more and for which two pilots are required by type certification or operating rule unless it is equipped with an approved cockpit voice recorder that:

(1) Is installed in compliance with § 23.1457(a) (1) and (2), (b), (c), (d), (e), (f), and (g); § 25.1457(a) (1) and (2), (b), (c), (d), (e), (f), and (g); 27.1457(a) (1) and (2), (b), (c), (d), (e), (f), and (g); or § 29.1457(a) (1) and (2), (b), (c), (d), (e), (f), and (g) of this chapter, as applicable; and

(2) Is operated continuously from the use of the checklist before the flight to completion of the final checklist at the end of the flight.

(f) In complying with this section, an approved cockpit voice recorder having an erasure feature may be used, so that at any time during the operation of the recorder, information recorded more than 15 minutes earlier may be erased or otherwise obliterated.

(g) In the event of an accident or occurrence requiring immediate notification to the National Transportation Safety Board under part 830 of its regulations that results in the termination of the flight, any operator who has installed approved flight recorders and approved cockpit voice recorders shall keep the recorded information for at least 60 days or, if requested by the Administrator or the Board, for a longer period. Information obtained from the record is used to assist in determining the cause of accidents or occurrences in connection with the investigation under part 830. The Adminis-

(a) *General.* The holder of an air carrier operating certificate or an operating certificate issued under Part 125 may conduct a ferry flight of a four-engine airplane or a turbine-engine-powered airplane equipped with three engines, with one engine inoperative, to a base for the purpose of repairing that engine subject to the following:

(1) The airplane model has been test flown and found satisfactory for safe flight in accordance with paragraph (b) or (c) of this section, as appropriate. However, each operator who before November 19, 1966, has shown that a model of airplane with an engine inoperative is satisfactory for safe flight by a test flight conducted in accordance with performance data contained in the applicable Airplane Flight Manual under paragraph (a)(2) of this section need not repeat the test flight for that model.

(2) The approved Airplane Flight Manual contains the following performance data and the flight is conducted in accordance with that data:

- (i) Maximum weight.
- (ii) Center of gravity limits.
- (iii) Configuration of the inoperative propeller (if applicable).
- (iv) Runway length for takeoff (including temperature accountability).
- (v) Altitude range.
- (vi) Certificate limitations.
- (vii) Ranges of operational limits.
- (viii) Performance information.
- (ix) Operating procedures.

(3) The operator has FAA approved procedures for the safe operation of the airplane, including specific requirements for—

- (i) Limiting the operating weight on any ferry flight to the minimum necessary for the flight plus the necessary reserve fuel load;
- (ii) A limitation that takeoffs must be made from dry runways unless, based on a showing of actual operating takeoff techniques on wet runways with one engine inoperative, takeoffs with full controllability from wet runways have been approved for the specific model aircraft and included in the Airplane Flight Manual;

this section if—

(i) The initial climb is over thickly populated areas; or

(ii) Weather conditions at the takeoff or destination airport are less than those required for VFR flight.

(5) Persons other than required flight crewmembers shall not be carried during the flight.

(6) No person may use a flight crewmember for flight under this section unless that crewmember is thoroughly familiar with the operating procedures for one-engine inoperative ferry flight contained in the certificate holder's manual and the limitations and performance information in the Airplane Flight Manual.

(b) *Flight tests: reciprocating-engine-powered airplanes.* The airplane performance of a reciprocating-engine-powered airplane with one engine inoperative must be determined by flight test as follows:

(1) A speed not less than  $1.3 V_{S1}$  must be chosen at which the airplane may be controlled satisfactorily in a climb with the critical engine inoperative (with its propeller removed or in a configuration desired by the operator and with all other engines operating at the maximum power determined in paragraph (b)(3) of this section.

(2) The distance required to accelerate to the speed listed in paragraph (b)(1) of this section and to climb to 50 feet must be determined with—

- (i) The landing gear extended;
- (ii) The critical engine inoperative and its propeller removed or in a configuration desired by the operator; and
- (iii) The other engines operating at not more than maximum power established under paragraph (b)(3) of this section.

(3) The takeoff, flight and landing procedures, such as the approximate trim settings, method of power application, maximum power, and speed must be established.

(4) The performance must be determined at a maximum weight not greater than the weight that allows a rate of climb of at least 400 feet per minute in the en route configuration set forth

(c) *Flight tests: Turbine-engine-powered airplanes.* The airplane performance of a turbine-engine-powered airplane with one engine inoperative must be determined by flight tests, including at least three takeoff tests, in accordance with the following:

(1) Takeoff speeds  $V_R$  and  $V_2$ , not less than the corresponding speeds under which the airplane was type certificated under § 25.107 of this chapter, must be chosen at which the airplane may be controlled satisfactorily with the critical engine inoperative (with its propeller removed or in a configuration desired by the operator, if applicable) and with all other engines operating at not more than the power selected for type certification as set forth in § 25.101 of this chapter.

(2) The minimum takeoff field length must be the horizontal distance required to accelerate and climb to the 35-foot height at  $V_2$  speed (including any additional speed increment obtained in the tests) multiplied by 115 percent and determined with—

- (i) The landing gear extended;
- (ii) The critical engine inoperative and its propeller removed or in a configuration desired by the operator (if applicable); and
- (iii) The other engine operating at not more than the power selected for type certification as set forth in § 25.101 of this chapter.

(3) The takeoff, flight, and landing procedures such as the approximate trim setting, method of power application, maximum power, and speed must be established. The airplane must be satisfactorily controllable during the entire takeoff run when operated according to these procedures.

two critical engines inoperative; and

(ii) The climb speed not less than the two-engine inoperative trim speed for the actual steady gradient of the final takeoff climb prescribed by paragraph (c)(4)(i) of this section.

(5) The airplane must be satisfactorily controllable in a climb with two critical engines inoperative. Climb performance may be shown by calculations based on, and equal in accuracy to, the results of testing.

(6) The performance must be determined using temperature accountability for takeoff distance and final takeoff climb computed in accordance with § 25.101 of this chapter.

For the purpose of paragraphs (c)(4) and (5) of this section, "two critical engines" means two adjacent engines on one side of an airplane with four engines, and the center engine and one outboard engine on an airplane with three engines.

#### **§ 91.613 Materials for compartment interiors.**

No person may operate an airplane that conforms to an amended or supplemental type certificate issued in accordance with SFAR No. 41 for a maximum certificated takeoff weight in excess of 12,500 pounds unless within 1 year after issuance of the initial airworthiness certificate under that SFAR the airplane meets the compartment interior requirements set forth in § 25.853(a), (b), (b-1), (b-2), and (b-3) of this chapter in effect on September 26, 1978.

**§§ 91.615 —**

**91.699 [Reserved]**



# Subpart H—Foreign Aircraft Operations and Operations of U.S.- Registered Civil Aircraft Outside of the United States

## § 91.701 Applicability.

This subpart applies to the operations of civil aircraft of U.S. registry outside of the United States and the operations of foreign civil aircraft within the United States.

## § 91.703 Operations of civil aircraft of U.S. registry outside of the United States.

(a) Each person operating a civil aircraft of U.S. registry outside of the United States shall—

(1) When over the high seas, comply with Annex 2 (Rules of the Air) to the Convention on International Civil Aviation and with §§ 91.117(c), 91.127, 91.129, and 91.131;

(2) When within a foreign country, comply with the regulations relating to the flight and maneuver of aircraft there in force;

(3) Except for §§ 91.307(b), 91.309, 91.323, and 91.711, comply with this part so far as it is not inconsistent with applicable regulations of the foreign country where the aircraft is operated or annex 2 of the Convention on International Civil Aviation; and

(4) [When operating within airspace designated as Minimum Navigation Performance Specifications (MNPS) airspace, comply with § 91.705. When operating within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace, comply with § 91.706.]

(b) [Annex 2 to the Convention on International Civil Aviation, Ninth Edition—July 1990, with Amendments through Amendment 32 effective February 19, 1996, to which reference is made in this part, is incorporated into this part and made a part hereof as provided in 5 U.S.C. § 552 and pursuant to 1 CFR part 51. Annex 2 (including a complete historic file of changes thereto) is available for public inspection at the Rules Docket (AGC-200), Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. In addition, Annex 2 may be purchased from the International Civil Aviation Organization (Attention:

Distribution Officer), P.O. Box 400, Succursale, Place de L'Aviation Internationale, 1000 Sherbrooke Street West, Montreal, Quebec, Canada H3A 2R2.]

(Amdt. 91-227, Eff. 9/16/93); [(Amdt. 91-254, Eff. 4/9/97)]

## § 91.705 [Operations within airspace designated as Minimum Navigation Performance Specification Airspace.

[(a) Except as provided in paragraph (b) of this section, no person may operate a civil aircraft of U.S. registry in airspace designated as Minimum Navigation Performance Specifications airspace unless—

[(1) The aircraft has approved navigation performance capability that complies with the requirements of appendix C of this part; and

[(2) The operator is authorized by the Administrator to perform such operations.

[(b) The Administrator may authorize a deviation from the requirements of this section in accordance with Section 3 of appendix C to this part.]

[(Amdt. 91-254, Eff. 4/9/97)]

## § 91.706 Operations within airspace designated as Reduced Vertical Separation Minimum Airspace.

[(a) Except as provided in paragraph (b) of this section, no person may operate a civil aircraft of U.S. registry in airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace unless:

[(1) The operator and the operator's aircraft comply with the requirements of appendix G of this part; and

[(2) The operator is authorized by the Administrator to conduct such operations.

[(b) The Administrator may authorize a deviation from the requirements of this section in accordance with Section 5 of appendix G to this part.]

[(Amdt. 91-254, Eff. 4/9/97)]

### § 91.709 Operations to Cuba.

No person may operate a civil aircraft from the United States to Cuba unless—

(a) Departure is from an international airport of entry designated in § 6.13 of the Air Commerce Regulations of the Bureau of Customs (19 CFR 6.13); and

(b) In the case of departure from any of the 48 contiguous States or the District of Columbia, the pilot in command of the aircraft has filed—

(1) A DVFR or IFR flight plan as prescribed in §§ 99.11 or 99.13 of this chapter; and

(2) A written statement, within 1 hour before departure, with the Office of Immigration and Naturalization Service at the airport of departure, containing—

(i) All information in the flight plan;

(ii) The name of each occupant of the aircraft;

(iii) The number of occupants of the aircraft; and

(iv) A description of the cargo, if any.

This section does not apply to the operation of aircraft by a scheduled air carrier over routes authorized in operations specifications issued by the Administrator.

(Approved by the Office of Management and Budget under OMB control number 2120-0005).

### § 91.711 Special rules for foreign civil aircraft.

(a) *General.* In addition to the other applicable regulations of this part, each person operating a foreign civil aircraft within the United States shall comply with this section.

(b) *VFR.* No person may conduct VFR operations which require two-way radio communications under this part unless at least one crewmember of that aircraft is able to conduct two-way radio communications in the English language and is on duty during that operation.

(c) *IFR.* No person may operate a foreign civil aircraft under IFR unless— (1) That aircraft is equipped with—

(i) [Radio equipment allowing two-way radio communication with ATC when it is operated in controlled airspace; and]

(ii) is thoroughly familiar with the United States en route, holding, and letdown procedures; and

(3) At least one crewmember of that aircraft is able to conduct two-way radiotelephone communications in the English language and that crewmember is on duty while the aircraft is approaching, operating within, or leaving the United States.

(d) *Over water.* Each person operating a foreign civil aircraft over water off the shores of the United States shall give flight notification or file a flight plan in accordance with the Supplementary Procedures for the ICAO region concerned.

(e) *Flight at and above FL 240.* If VOR navigational equipment is required under paragraph (c)(1)(ii) of this section, no person may operate a foreign civil aircraft within the 50 States and the District of Columbia at or above FL 240, unless the aircraft is equipped with distance measuring equipment (DME) capable of receiving and indicating distance information from the VORTAC facilities to be used. When DME required by this paragraph fails at and above FL 240, the pilot in command of the aircraft shall notify ATC immediately and may then continue operations at and above FL 240 to the next airport of intended landing at which repairs or replacement of the equipment can be made. However, paragraph (e) of this section does not apply to foreign civil aircraft that are not equipped with DME when operated for the following purposes and if ATC is notified prior to each takeoff:

(1) Ferry flights to and from a place in the United States where repairs or alterations are to be made.

(2) Ferry flights to a new country of registry.

(3) Flight of a new aircraft of U.S. manufacture for the purpose of—

(i) Flight testing the aircraft;

(ii) Training foreign flight crews in the operation of the aircraft; or

(iii) Ferrying the aircraft for export delivery outside the United States.

(4) Ferry, demonstration, and test flight of an aircraft brought to the United States for the pur-



No person may operate a civil aircraft of Cuban registry except in controlled airspace and in accordance with air traffic clearance or air traffic control instructions that may require use of specific airways or routes and landings at specific airports.

**§ 91.715 Special flight authorizations for foreign civil aircraft.**

(a) Foreign civil aircraft may be operated without airworthiness certificates required under § 91.203 if a special flight authorization for that operation is issued under this section. Application for a special flight authorization must be made to the [Flight Standards Division Manager or Aircraft Certification Directorate Manager] of the FAA region in which the applicant is located or to the region

(b) The Administrator may issue a special flight authorization for a foreign civil aircraft subject to any conditions and limitations that the Administrator considers necessary for safe operation in the U.S. airspace.

(c) No person may operate a foreign civil aircraft under a special flight authorization unless that operation also complies with part 375 of the Special Regulations of the Department of Transportation (14 CFR part 375).

(Approved by the Office of Management and Budget under OMB control number 2120-0005).  
[(Amdt. 91-212, Eff. 8/18/90)]

**§§ 91.717 — 91.799 [Reserved]**



## § 91.801 Applicability: Relation to part 36.

(a) This subpart prescribes operating noise limits and related requirements that apply, as follows, to the operation of civil aircraft in the United States.

(1) Sections 91.803, 91.805, 91.807, 91.809, and 91.811 apply to civil subsonic turbojet airplanes with maximum weights of more than 75,000 pounds and—

(i) If U.S. registered, that have standard airworthiness certificates; or

(ii) If foreign registered, that would be required by this chapter to have a U.S. standard airworthiness certificate in order to conduct the operations intended for the airplane were it registered in the United States. Those sections apply to operations to or from airports in the United States under this part and parts 121, 125, 129, and 135 of this chapter.

(2) Section 91.813 applies to U.S. operators of civil subsonic turbojet airplanes covered by this subpart. This section applies to operators operating to or from airports in the United States under this part and parts 121, 125, and 135, but not to those operating under part 129 of this chapter.

(3) Sections 91.803, 91.819, and 91.821 apply to U.S.-registered civil supersonic airplanes having standard airworthiness certificates and to foreign-registered civil supersonic airplanes that, if registered in the United States, would be required by this chapter to have U.S. standard airworthiness certificates in order to conduct the operations intended for the airplane. Those sections apply to operations under this part and under parts 121, 125, 129, and 135 of this chapter.

(b) Unless otherwise specified, as used in this subpart “part 36” refers to 14 CFR part 36, including the noise levels under appendix C of that part, notwithstanding the provisions of that part excepting certain airplanes from the specified noise requirements. For purposes of this subpart, the various stages of noise levels, the terms used to describe airplanes with respect to those levels, and the terms “subsonic airplane” and “supersonic airplane” have the meanings specified under part 36 of this chapter. For purposes of this subpart, for subsonic

airplanes operated in foreign air commerce in the United States, the Administrator may accept compliance with the noise requirements under annex 16 of the International Civil Aviation Organization when those requirements have been shown to be substantially compatible with, and achieve results equivalent to those achievable under, part 36 for that airplane. Determinations made under these provisions are subject to the limitations of § 36.5 of this chapter as if those noise levels were part 36 noise levels.

(c) Sections 91.851 through 91.877 of this subpart prescribe operating noise limits and related requirements that apply to any civil subsonic turbojet airplane with a maximum certificated weight of more than 75,000 pounds operating to or from an airport in the 48 contiguous United States and the District of Columbia under this part, part 121, 125, 129, or 135 of this chapter on and after September 25, 1991.

[(d) Section 91.877 prescribes reporting requirements that apply to any civil subsonic turbojet airplane with a maximum weight of more than 75,000 pounds operated by an air carrier or foreign air carrier between the contiguous United States and the State of Hawaii, between the State of Hawaii and any point outside of the 48 contiguous United States, or between the islands of Hawaii in turnaround service, under part 121 or 129 of this chapter on or after November 5, 1990.]

(Amdt. 91-225, Eff. 9/25/91); [(Amdt. 91-252, Eff. 1/15/97)]

## § 91.803 Part 125 operators: Designation of applicable regulations.

For airplanes covered by this subpart and operated under part 125 of this chapter, the following regulations apply as specified:

(a) For each airplane operation to which requirements prescribed under this subpart applied before November 29, 1980, those requirements of this subpart continue to apply.

(b) For each subsonic airplane operation to which requirements prescribed under this subpart did not apply before November 29, 1980, because the airplane was not operated in the United States under

the airplane was not operated in the United States under this part or part 121, 129, or 135 of this chapter, the requirements of §§ 91.819 and 91.821 of this subpart apply.

(d) For each airplane required to operate under part 125 for which a deviation under that part is approved to operate, in whole or in part, under this part or part 121, 129, or 135 of this chapter, notwithstanding the approval, the requirements prescribed under paragraphs (a), (b), and (c) of this section continue to apply.

#### **§ 91.805 Final compliance: Subsonic airplanes.**

Except as provided in §§ 91.809 and 91.811, on and after January 1, 1985, no person may operate to or from an airport in the United States any subsonic airplane covered by this subpart unless that airplane has been shown to comply with Stage 2 or Stage 3 noise levels under part 36 of this chapter.

#### **§ 91.807 Phased compliance under parts 121, 125, and 135: Subsonic airplanes.**

(a) *General.* Each person operating airplanes under part 121, 125, or 135 of this chapter, as prescribed under § 91.803 of this subpart, regardless of the state of registry of the airplane, shall comply with this section with respect to subsonic airplanes covered by this subpart.

(b) *Compliance schedules.* Except for airplanes shown to be operated in foreign air commerce under paragraph (c) of this section or covered by an exemption (including those issued under § 91.811), airplanes operated by U.S. operators in air commerce in the United States must be shown to comply with Stage 2 or Stage 3 noise levels under part 36 of this chapter, in accordance with the following schedule, or they may not be operated to or from airports in the United States:

(1) By January 1, 1981—

(i) At least one quarter of the airplanes that have four engines with no bypass ratio or with a bypass ratio less than two; and

(ii) At least half of the airplanes powered by engines with any other bypass ratio or by another number of engines.

(2) By January 1, 1983—

(c) *Apportionment of airplanes.* For purposes of paragraph (b) of this section, a person operating airplanes engaged in domestic and foreign air commerce in the United States may elect not to comply with the phased schedule with respect to that portion of the airplanes operated by that person shown, under an approved method of apportionment, to be engaged in foreign air commerce in the United States.

#### **§ 91.809 Replacement airplanes.**

A Stage 1 airplane may be operated after the otherwise applicable compliance dates prescribed under §§ 91.805 and 91.807 if, under an approved plan, a replacement airplane has been ordered by the operator under a binding contract as follows:

(a) For replacement of an airplane powered by two engines, until January 1, 1986, but not after the date specified in the plan, if the contract is entered into by January 1, 1983, and specifies delivery before January 1, 1986, of a replacement airplane which has been shown to comply with Stage 3 noise levels under part 36 of this chapter.

(b) For replacement of an airplane powered by three engines, until January 1, 1985, but not after the date specified in the plan, if the contract is entered into by January 1, 1983, and specifies delivery before January 1, 1985, of a replacement airplane which has been shown to comply with Stage 3 noise levels under part 36 of this chapter.

(c) For replacement of any other airplane, until January 1, 1985, but not after the date specified in the plan, if the contract specifies delivery before January 1, 1985, of a replacement airplane which—

(1) Has been shown to comply with Stage 2 or Stage 3 noise levels under part 36 of this chapter prior to issuance of an original standard airworthiness certificate; or

(2) Has been shown to comply with Stage 3 noise levels under part 36 of this chapter prior to issuance of a standard airworthiness certificate other than original issue.

(d) Each operator of a Stage 1 airplane for which approval of a replacement plan is requested under this section shall submit to the Director, Office of Environment and Energy, an application constituting the proposed replacement plan (or revised plan) that contains the information specified under

approval, as follows.

- (1) Name and address of the applicant.
- (2) Aircraft type and model and registration number for each airplane to be replaced under the plan.
- (3) Aircraft type and model of each replacement airplane.
- (4) Scheduled dates of delivery and introduction into service of each replacement airplane.
- (5) Names and addresses of the parties to the contract and any other persons who may effectively cancel the contract or otherwise control the performance of any party.
- (6) Information specifying the anticipated disposition of the airplanes to be replaced.
- (7) A statement that the contract represents a legally enforceable, mutual agreement for delivery of an eligible replacement airplane.
- (8) Any other information or documentation requested by the Director, Office of Environment and Energy, reasonably necessary to determine whether the plan should be approved.

**§91.811 Service to small communities exemption: Two-engine, subsonic airplanes.**

(a) A Stage 1 airplane powered by two engines may be operated after the compliance dates prescribed under §§ 91.805, 91.807, and 91.809 when, with respect to that airplane, the Administrator issues an exemption to the operator from the noise level requirements under this subpart. Each exemption issued under this section terminates on the earliest of the following dates:

- (1) For an exempted airplane sold, or otherwise disposed of, to another person on or after January 1, 1983, on the date of delivery to that person.
- (2) For an exempted airplane with a seating configuration of 100 passenger seats or less, on January 1, 1988.
- (3) For an exempted airplane with a seating configuration of more than 100 passenger seats, on January 1, 1985.

(b) For the purpose of this section, the seating configuration of an airplane is governed by that shown to exist on December 1, 1979, or an earlier date established for that airplane by the Administrator.

of Environment and Energy, in accordance with this section, the operator's current compliance status and plan for achieving and maintaining compliance with the applicable noise level requirements of this subpart. If appropriate, an operator may substitute for the required plan a notice, certified as true (under penalty of 18 U.S.C. 1001) by that operator, that no change in the plan or status of any airplane affected by the plan has occurred since the date of the plan most recently submitted under this section.

(b) Each compliance plan, including each revised plan, must contain the information specified under paragraph (c) of this section for each airplane covered by this section that is operated by the operator. Unless otherwise approved by the Administrator, compliance plans must provide the required plan and status information as it exists on the date 30 days before the date specified for submission of the plan. Plans must be certified by the operator as true and complete (under penalty of 18 U.S.C. 1001) and be submitted for each airplane covered by this section on or before 90 days after initially commencing operation of airplanes covered by this section, whichever is later, and thereafter—

(1) Thirty days after any change in the operator's fleet or compliance planning decisions that has a separate or cumulative effect on 10 percent or more of the airplanes in either class of airplanes covered by § 91.807(b); and

(2) Thirty days after each compliance date applicable to that airplane under this subpart, and annually thereafter through 1985, or until any later date for that airplane prescribed under this subpart, on the anniversary of that submission date, to show continuous compliance with this subpart.

(c) Each compliance plan submitted under this section must identify the operator and include information regarding the compliance plan and status for each airplane covered by the plan as follows:

- (1) Name and address of the airplane operator.
- (2) Name and telephone number of the person designated by the operator to be responsible for the preparation of the compliance plan and its submission.
- (3) The total number of airplanes covered by this section and in each of the following classes and subclasses:

(B) Airplanes powered by engines with any other bypass ratio or by another number of engines; and

(C) Airplanes covered by an exemption issued under § 91.811 of this subpart.

(ii) For airplanes engaged in foreign air commerce under an approved apportionment plan—

(A) Airplanes powered by four turbojet engines with no bypass ratio or with a bypass ratio less than two;

(B) Airplanes powered by engines with any other bypass ratio or by another number of engines; and

(C) Airplanes covered by an exemption issued under § 91.811 of this subpart.

(4) For each airplane covered by this section—

(i) Aircraft type and model;

(ii) Aircraft registration number;

(iii) Aircraft manufacturer serial number;

(iv) Aircraft powerplant make and model;

(v) Aircraft year of manufacture;

(vi) Whether part 36 noise level compliance has been shown; “Yes/No”;

(vii) The appropriate code prescribed under paragraph (c)(5) of this section which indicates the acoustical technology installed, or to be installed, on the airplane;

(viii) For airplanes on which acoustical technology has been or will be applied, following the appropriate code entry, the actual or scheduled month and year of installation on the airplane;

(ix) For DC-8 and B-707 airplanes operated in domestic U.S. air commerce which have been or will be retired from service in the United States without replacement between January 24, 1977, and January 1, 1985, the appropriate code prescribed under paragraph (c)(5) of this section followed by the actual or scheduled month and year of retirement of the airplane from service;

(x) For DC-8 and B-707 airplanes operated in foreign air commerce in the United States which have been or will be retired from service in the United States without replacement between April 14, 1980, and January 1, 1985, the appropriate code prescribed under paragraph (c)(5) of this section followed by the

paragraph (c)(5) of this section followed by the scheduled month and year for replacement of the airplane;

(xii) For airplanes designated as “engaged in foreign commerce” in accordance with an approved method of apportionment under § 91.807(c) of this subpart, the appropriate code prescribed under paragraph (c)(5) of this section;

(xiii) For airplanes covered by an exemption issued to the operator granting relief from noise level requirements of this subpart, the appropriate code prescribed under paragraph (c)(5) of this section followed by the actual or scheduled month and year of expiration of the exemption and the appropriate code and applicable dates which indicate the compliance strategy planned or implemented for the airplane;

(xiv) For all airplanes covered by this section, the number of spare shipsets of acoustical components needed for continuous compliance and the number available on demand to the operator in support of those airplanes; and

(xv) For airplanes for which none of the other codes prescribed under paragraph (c)(5) of this section describes either the technology applied or to be applied to the airplane in accordance with the certification requirements under parts 21 and 36 of this chapter, or the compliance strategy or methodology following the code “OTH,” enter the date of any certificate action and attach an addendum to the plan explaining the nature and the extent of the certificated technology, strategy, or methodology employed, with reference to the type certificate documentation.

(5) Table of Acoustical Technology/Strategy Codes

Code	Airplane type/model	Certificate technology
A .....	B-707-120B; B-707-320B/C; B-720B	Quiet nacelles + 1-ring.
B .....	B-727-100	Double wall fan duct treatment.

D .....	B-727-200; B-737-100; B-737-200	type certificate). Quiet nacelles + double wall fan duct treatment.
E .....	B-747-100 (pre-December 1971); B-747-200 (pre-December 1971)	Fixed lip inlets + and bullet with treatment + fan duct treatment areas.
F .....	DC-8	New extended inlet and bullet with treatment + fan duct treatment areas.
G .....	DC-9	P-36 sound absorbing material treatment kit.
H .....	BAC-111-200	Silencer kit (BAC Acoustic Report 522).
I .....	BAC-111-400	Silencer kit (BAC Acoustic Report 598).
J .....	B-707; DC-8	Reengined with high bypass ratio turbojet engines + quiet nacelles (if certificated under stage 3 noise level requirements).

REP—For airplanes covered by an approved replacement plan under § 91.807(c) of this subpart.

EFC—For airplanes designated as “engaged in foreign commerce” in accordance with an approved method of apportionment under § 91.811 of this subpart.

RET—For DC-8 and B-707 airplanes operated in domestic U.S. air commerce and retired from service in the United States without replacement between January 24, 1977, and January 1, 1985.

RFC—For DC-8 and B-707 airplanes operated by U.S. operators in foreign air commerce in the United States and retired from service in the United States without replacement between April 14, 1980, and January 1, 1985.

EXD—For airplanes exempted from showing compliance with the noise level requirements of this subpart.

OTH—For airplanes for which no other prescribed code describes either the certificated technology applied or to be applied to the airplane, or the compliance strategy or methodology. (An

(a) This section applies to propeller-driven, small airplanes having standard airworthiness certificates that are designed for “agricultural aircraft operations” (as defined in 137.3 of this chapter, as effective on January 1, 1966) or for dispensing fire fighting materials.

(b) If the Airplane Flight Manual, or other approved manual material information, markings, or placards for the airplane indicate that the airplane has not been shown to comply with the noise limits under part 36 of this chapter, no person may operate that airplane, except—

(1) To the extent necessary to accomplish the work activity directly associated with the purpose for which it is designed;

(2) To provide flight crewmember training in the special purpose operation for which the airplane is designed; and

(3) To conduct “nondispensing aerial work operations” in accordance with the requirements under § 137.29(c) of this chapter.

#### § 91.817 Civil aircraft sonic boom.

(a) No person may operate a civil aircraft in the United States at a true flight Mach number greater than 1 except in compliance with conditions and limitations in an authorization to exceed Mach 1 issued to the operator under appendix B of this part.

(b) In addition, no person may operate a civil aircraft for which the maximum operating limit speed  $M_{MO}$  exceeds a Mach number of 1, to or from an airport in the United States, unless—

(1) Information available to the flight crew includes flight limitations that ensure that flights entering or leaving the United States will not cause a sonic boom to reach the surface within the United States; and

(2) The operator complies with the flight limitations prescribed in paragraph (b)(1) of this section or complies with conditions and limitations in an authorization to exceed Mach 1 issued under appendix B of this part.

(Approved by the Office of Management and Budget under OMB control number 2120-0005).

in effect on October 13, 1977, using applicable trade-off provisions, and that are operated in the United States, after July 31, 1978.

(b) *Airport use.* Except in an emergency, the following apply to each person who operates a civil supersonic airplane to or from an airport in the United States:

(1) Regardless of whether a type design change approval is applied for under part 21 of this chapter, no person may land or take off an airplane covered by this section for which the type design is changed, after July 31, 1978, in a manner constituting an "acoustical change" under § 21.93 unless the acoustical change requirements of part 36 are complied with.

(2) No flight may be scheduled, or otherwise planned, for takeoff or landing after 10 p.m. and before 7 a.m. local time.

#### **§ 91.821 Civil supersonic airplanes: Noise limits.**

Except for Concorde airplanes having flight time before January 1, 1980, no person may operate in the United States, a civil supersonic airplane that does not comply with Stage 2 noise limits of part 36 in effect on October 13, 1977, using applicable trade-off provisions.

#### **§§ 91.823 — 91.849 [Reserved]**

#### **§ 91.851 Definitions.**

For the purposes of §§ 91.851 through 91.877 of this subpart:

*Contiguous United States* means the area encompassed by the 48 contiguous United States and the District of Columbia.

*Fleet* means those civil subsonic turbojet airplanes with a maximum certificated weight of more than 75,000 pounds that are listed on an operator's operations specifications as eligible for operation in the contiguous United States.

*Import* means a change in ownership of an airplane from a non-U.S. person to a U.S. person when the airplane is brought into the United States for operation.

*Operations specifications* means an enumeration of airplanes by type, model, series, and serial number operated by the operator or foreign air carrier

United States pursuant to part 47 of this chapter. *New entrant* means an air carrier or foreign air carrier that, on or before November 5, 1990, did not conduct operations under [part 121 or 129] of this chapter using an airplane covered by this subpart to or from any airport in the contiguous United States, but that initiates such operation after that date.

*Stage 2 noise levels* means the requirements for Stage 2 noise levels as defined in part 36 of this chapter in effect on November 5, 1990.

*Stage 3 noise levels* means the requirements for Stage 3 noise levels as defined in part 36 of this chapter in effect on November 5, 1990.

*Stage 2 airplane* means a civil subsonic turbojet airplane with a maximum certificated weight of 75,000 pounds or more that complies with Stage 2 noise levels as defined in part 36 of this chapter.

*Stage 3 airplane* means a civil subsonic turbojet airplane with a maximum certificated weight of 75,000 pounds or more that complies with Stage 3 noise levels as defined in part 36 of this chapter.

(Amdt. 91-225, Eff. 9/25/91); [(Amdt. 91-252, Eff. 1/15/97)]

#### **§ 91.853 Final compliance: civil subsonic airplanes.**

[Except as provided in § 91.873, after December 31, 1999, no person shall operate to or from any airport in the contiguous United States any airplane subject to § 91.801(c) of this subpart, unless that airplane has been shown to comply with Stage 3 noise levels.]

[(Amdt. 91-225, Eff. 9/25/91)]

#### **§ 91.855 Entry and nonaddition rule.**

[No person may operate any airplane subject to § 91.801(c) of this subpart to or from an airport in the contiguous United States unless one or more of the following apply:

[(a) The airplane complies with Stage 3 noise levels.

[(b) The airplane complies with Stage 2 noise levels and was owned by a U.S. person on and since November 5, 1990. Stage 2 airplanes that meet these criteria and are leased to foreign airlines are also subject to the return provisions of paragraph (e) of this section.



in effect on that date, and any extensions thereof provided for in that lease.

[(d) The airplane complies with Stage 2 noise levels and is operated by a foreign air carrier.

[(e) The airplane complies with Stage 2 noise levels and is operated by a foreign operator other than for the purpose of foreign air commerce.

[(f) The airplane complies with Stage 2 noise levels and —

[(1) On November 5, 1990, was owned by:

[(i) A corporation, trust, or partnership organized under the laws of the United States or any State (including individual States, territories, possessions, and the District of Columbia);

[(ii) An individual who is a citizen of the United States; or

[(iii) An entity owned or controlled by a corporation, trust, partnership, or individual described in paragraph (g)(1)(i) or (ii) of this section; and

[(2) Enters into the United States not later than 6 months after the expiration of a lease agreement (including any extensions thereof) between an owner described in paragraph (f)(1) of this section and a foreign airline.

[(g) The airplane complies with Stage 2 noise levels and was purchased by the importer under a written contract executed before November 5, 1990.

[(h) Any Stage 2 airplane described in this section is eligible for operation in the contiguous United States only as provided under § 91.865 or § 91.867.]

[(Amdt. 91-225, Eff. 9/25/91)]

**§ 91.857 [Stage 2 operations outside of the 48 contiguous United States, and authorization for maintenance.]**

[An operator of a Stage 2 airplane that is operating only between points outside the contiguous United States on or after November 5, 1990, shall—]

(a) Include in its operations specifications a statement that such airplane may not be used to provide air transportation to or from any airport in the contiguous United States.

(Amdt. 91-225, Eff. 9/25/91); [(Amdt. 91-252, Eff. 1/15/97)]

**§ 91.859 Modification to meet Stage 3 noise levels.**

[For an airplane subject to § 91.801(c) of this subpart and otherwise prohibited from operation to or from an airport in the contiguous United States by § 91.855, any person may apply for a special flight authorization for that airplane to operate in the contiguous United States for the purpose of obtaining modifications to meet Stage 3 noise levels.]

[(Amdt. 91-225, Eff. 9/25/91)]

**§ 91.861 Base level.**

[(a) U.S. Operators. The base level of a U.S. operator is equal to the number of owned or leased Stage 2 airplanes subject to § 91.801(c) of this subpart that were listed on that operator's operations specifications for operations to or from airports in the contiguous United States on any one day selected by the operator during the period January 1, 1990 through July 1, 1991, plus or minus adjustments made pursuant to paragraphs (a)(1) and (2).

[(1) The base level of a U.S. operator shall be increased by a number equal to the total of the following—

[(i) The number of Stage 2 airplanes returned to service in the United States pursuant to § 91.855(f);

[(ii) The number of Stage 2 airplanes purchased pursuant to § 91.855(g); and

[(iii) Any U.S. operator base level acquired with a Stage 2 airplane transferred from another person under § 91.863.

[(2) The base level of a U.S. operator shall be decreased by the amount of U.S. operator base level transferred with the corresponding number of Stage 2 airplanes to another person under § 91.863.

[(b) Foreign air carriers. The base level of a foreign air carrier is equal to the number of owned or leased Stage 2 airplanes that were listed on that carrier's U.S. operations specifications on any one day during the period January 1, 1990, through July 1, 1991, plus or minus any adjustments to

from another person under § 91.863.  
[(2) The base level of a foreign air carrier shall be decreased by the amount of foreign air carrier base level transferred with a Stage 2 airplane to another person under § 91.863.

[(c) New entrants do not have a base level.]  
[(Amdt. 91-225, Eff. 9/25/91)]

#### **§91.863 Transfers of Stage 2 airplanes with base level.**

[(a) Stage 2 airplanes may be transferred with or without the corresponding amount of base level. Base level may not be transferred without the corresponding number of Stage 2 airplanes.

[(b) No portion of a U.S. operator's base level established under § 91.861(a) may be used for operations by a foreign air carrier. No portion of a foreign air carrier's base level established under § 91.861(b) may be used for operations by a U.S. operator.

[(c) Whenever a transfer of Stage 2 airplanes with base level occurs, the transferring and acquiring parties shall, within 10 days, jointly submit written notification of the transfer to the FAA, Office of Environment and Energy. Such notification shall state:

[(1) The names of the transferring and acquiring parties;

[(2) The name, address, and telephone number of the individual responsible for submitting the notification on behalf of the transferring and acquiring parties;

[(3) The total number of Stage 2 airplanes transferred, listed by airplane type, model, series, and serial number;

[(4) The corresponding amount of base level transferred and whether it is U.S. operator or foreign air carrier base level; and

[(5) The effective date of the transaction.

[(d) If, taken as a whole, a transaction or series of transactions made pursuant to this section does not produce an increase or decrease in the number of Stage 2 airplanes for either the acquiring or transferring operator, such transaction or series of transactions may not be used to establish compliance with the requirements of § 91.865.]

[(Amdt. 91-225, Eff. 9/25/91)]

regardless of the national registry of the airplane, shall comply with paragraph (b) or (d) of this section at each interim compliance date with regard to its subsonic airplane fleet covered by § 91.801(c) of this subpart.

[(a) This section does not apply to new entrants covered by § 91.867 or to foreign operators not engaged in foreign air commerce.

[(b) Each operator that chooses to comply with this paragraph pursuant to any interim compliance requirement shall reduce the number of Stage 2 airplanes it operates that are eligible for operation in the contiguous United States to a maximum of:

[(1) After December 31, 1994, 75 percent of the base level held by the operator;

[(2) After December 31, 1996, 50 percent of the base level held by the operator;

[(3) After December 31, 1998, 25 percent of the base level held by the operator.

[(c) Except as provided under § 91.871, the number of Stage 2 airplanes that must be reduced at each compliance date contained in paragraph (b) of this section shall be determined by reference to the amount of base level held by the operator on that compliance date, as calculated under § 91.861.

[(d) Each operator that chooses to comply with this paragraph pursuant to any interim compliance requirement shall operate a fleet that consists of:

[(1) After December 31, 1994, not less than 55 percent Stage 3 airplanes;

[(2) After December 31, 1996, not less than 65 percent Stage 3 airplanes;

[(3) After December 31, 1998, not less than 75 percent Stage 3 airplanes.

[(e) Calculations resulting in fractions may be rounded to permit the continued operation of the next whole number of Stage 2 airplanes.]

[(Amdt. 91-225, Eff. 9/25/91)]

#### **§91.867 Phased compliance for new entrants.**

(a) New entrant U.S. air carriers.

(1) A new entrant initiating operations under [part 121] of this chapter on or before December 31, 1994, may initiate service without regard to the percentage of its fleet composed of Stage 3 airplanes.

with Stage 3 noise levels.

(4) After December 31, 1998, at least 75 percent of the fleet of a new entrant must comply with Stage 3 noise levels.

(b) New entrant foreign air carriers.

(1) A new entrant foreign air carrier initiating part 129 operations on or before December 31, 1994, may initiate service without regard to the percentage of its fleet composed of Stage 3 airplanes.

(2) After December 31, 1994, at least 25 percent of the fleet on U.S. operations specifications of a new entrant foreign air carrier must comply with Stage 3 noise levels.

(3) After December 31, 1996, at least 50 percent of the fleet on U.S. operations specifications of a new entrant foreign air carrier must comply with Stage 3 noise levels.

(4) After December 31, 1998, at least 75 percent of the fleet on U.S. operations specifications of a new entrant foreign air carrier must comply with Stage 3 noise levels.

(c) Calculations resulting in fractions may be rounded to permit the continued operation of the next whole number of Stage 2 airplanes.

(Amdt. 91-225, Eff. 9/25/91); [(Amdt. 91-252, Eff. 1/15/97)]

#### **[§91.869 Carry-forward compliance.]**

[(a) Any operator that exceeds the requirements of paragraph (b) of §91.865 of this part on or before December 31, 1994, or on or before December 31, 1996, may claim a credit that may be applied at a subsequent interim compliance date.]

[(b) Any operator that eliminates or modifies more Stage 2 airplanes pursuant to §91.865(b) than required as of December 31, 1994, or December 31, 1996, may count the number of additional Stage 2 airplanes reduced as a credit toward—

[(1) The number of Stage 2 airplanes that it would otherwise be required to reduce following a subsequent interim compliance date specified in §91.865(b); or

[(2) The number of Stage 3 airplanes it would otherwise be required to operate in its fleet following a subsequent interim compliance date to meet the percentage requirements specified in §91.865(d).]

[(Amdt. 91-225, Eff. 9/25/91)]

individual compliance requirement.

[(b) Applications must be filed with the Secretary of Transportation at least 120 days prior to the compliance date from which the waiver is requested.]

[(c) Applicants must show that a grant of waiver would be in the public interest, and must include in its application its plans and activities for modifying its fleet, including evidence of good faith efforts to comply with the requirements of §91.865 or §91.867. The application should contain all information the applicant considers relevant, including, as appropriate, the following:

[(1) The applicant's balance sheet and cash flow positions;

[(2) The composition of the applicant's current fleet; and

[(3) The applicant's delivery position with respect to new airplanes or noise-abatement equipment.]

[(d) Waivers will be granted only upon a showing by the applicant that compliance with the requirements of §91.865 or §91.867 at a particular interim compliance date is financially onerous, physically impossible, or technologically infeasible, or that it would have an adverse effect on competition or on service to small communities.]

[(e) The conditions of any waiver granted under this section shall be determined by the circumstances presented in the application, but in no case may the term extend beyond the next interim compliance date.]

[(f) A summary of any request for a waiver under this section will be published in the *Federal Register*, and public comment will be invited. Unless the Secretary finds that circumstances require otherwise, the public comment period will be at least 14 days.]

[(Amdt. 91-225, Eff. 9/25/91)]

#### **[§91.873 Waivers from final compliance.]**

[(a) A U.S. air carrier may apply for a waiver from the prohibition contained in §91.853 for its remaining Stage 2 airplanes, provided that, by July 1, 1999, at least 85 percent of the airplanes used by the carrier to provide service to or from an airport in the contiguous United States will comply with the Stage 3 noise levels.]

earliest practicable time.

[(c) To be eligible to apply for the waiver under this section, a new entrant U.S. air carrier must initiate service no later than January 1, 1999, and must comply fully with all provisions of this section.

[(d) The Secretary may grant a waiver under this section if the Secretary finds that granting such waiver is in the public interest. In making such a finding, the Secretary shall include consideration of the effect of granting such a waiver on competition in the air carrier industry and the effect on small community air service, and any other information submitted by the applicant that the Secretary considers relevant.

[(e) The term of any waiver granted under this section shall be determined by the circumstances presented in the application, but in no case will the waiver permit the operation of any Stage 2 airplane covered by this subchapter in the contiguous United States after December 31, 2003.

[(f) A summary of any request for a waiver under this section will be published in the *Federal Register*, and public comment will be invited. Unless the Secretary finds that circumstances require otherwise, the public comment period will be at least 14 days.]

(Amdt. 91-225, Eff. 9/25/91)]

#### **§91.875 Annual progress reports.**

[(a) Each operator subject to §91.865 or §91.867 of this chapter shall submit an annual report to the FAA, Office of Environment and Energy, on the progress it has made toward complying with the requirements of that section. Such reports shall be submitted no later than 45 days after the end of a calendar year. All progress reports must provide the information through the end of the calendar year, be certified by the operator as true and complete (under penalty of 18 U.S.C. 1001), and include the following information:

[(1) The name and address of the operator;

[(2) The name, title, and telephone number of the person designated by the operator to be responsible for ensuring the accuracy of the information in the report;

[(3) The operator's progress during the reporting period toward compliance with the require-

tions (grouped separately by those airplanes acquired with and without base level);

[(ii) Each Stage 2 airplane modified to Stage 3 noise levels (identifying the manufacturer and model of noise abatement retrofit equipment);

[(iii) Each Stage 3 airplane on U.S. operations specifications as of the last day of the reporting period; and

[(iv) For each Stage 2 airplane transferred or acquired, the name and address of the recipient or transferor; and if base level was transferred, the person to or from whom base level was transferred or acquired pursuant to section 91.863 along with the effective date of each base level transaction, and the type of base level transferred or acquired.

[(b) Each operator subject to §91.865 or §91.867 of this chapter shall submit an initial progress report covering the period from January 1, 1990, through December 31, 1991, and provide:

[(1) For each operator subject to §91.865:

[(i) The date used to establish its base level pursuant to §91.861(a); and

[(ii) a list of those Stage 2 airplanes (by type, model, series, and serial number) in its base level, including adjustments made pursuant to §91.861 after the date its base level was established.

[(2) For each U.S. operator:

[(i) A plan to meet the compliance schedules in §91.865 or §91.867 and the final compliance date of §91.853, including the schedule for delivery of replacement Stage 3 airplanes or the installation of noise abatement retrofit equipment; and

[(ii) A separate list (by type, model, series, and serial number) of those airplanes included in the operator's base level, pursuant to §91.861(a)(1)(i) and (ii), under the categories "returned" or "purchased," along with the date each was added to its operations specifications.

[(c) Each operator subject to §91.865 or §91.867 of this chapter shall submit subsequent annual progress reports covering the calendar year preceding the report and including any changes in the information provided in paragraphs (a) and (b) of

[(e) If an operator's actions during any reporting period cause it to achieve compliance with § 91.853, the report should include a statement to that effect. Further progress reports are not required unless there is any change in the information reported pursuant to (a) of this section.]

[(f) For each U.S. operator subject to § 91.865, progress reports submitted for calendar years 1994, 1996, and 1998, shall also state how the operator achieved compliance with the requirements of that section, i.e.—

[(1) By reducing the number of Stage 2 airplanes in its fleet to no more than the maximum permitted percentage of its base level under § 91.865(b), or

[(2) By operating a fleet that consists of at least the minimum required percentage of Stage 3 airplanes required under § 91.865(d).]

[(Amdt. 91-225, Eff. 9/25/91)]

#### **§ 91.877 Annual reporting of Hawaiian operations.**

[(a) Each air carrier or foreign air carrier subject to § 91.865 or § 91.867 of this part that conducts operations between the contiguous United States and the State of Hawaii, between the State of Hawaii and any point outside of the contiguous United States, or between the islands of Hawaii in turnaround service, on or since November 5, 1990, shall include in its annual report the information described in paragraph (c) of this section.]

[(b) Each air carrier or foreign air carrier not subject to § 91.865 or § 91.867 of this part that conducts operations between the contiguous U.S. and the State of Hawaii, between the State of Hawaii and any point outside of the contiguous United States, or between the islands of Hawaii in turnaround service, on or since November 5, 1990, shall submit an annual report to the FAA, Office of Environment and Energy, on its compliance with the Hawaiian operations provisions of 49 U.S.C. 47528. Such reports shall be submitted no later than 45 days after the end of a calendar year. All progress reports must provide the information through the end of the calendar year, be certified by the operator as true and complete (under penalty of 18 U.S.C. 1001), and include the following information—

(3) The information specified in paragraph (c) of this section.

[(c) The following information must be included in reports filed pursuant to this section—

(1) For operations conducted between the contiguous United States and the State of Hawaii—

(i) The number of Stage 2 airplanes used to conduct such operations as of November 5, 1990;

(ii) Any change to that number during the calendar year being reported, including the date of such change;

(2) For air carriers that conduct inter-island turnaround service in the State of Hawaii—

(i) The number of Stage 2 airplanes used to conduct such operations as of November 5, 1990;

(ii) Any change to that number during the calendar year being reported, including the date of such change;

(iii) For an air carrier that provided inter-island turnaround service within the state of Hawaii on November 5, 1990, the number reported under paragraph (c)(2)(i) of this section may include all Stage 2 airplanes with a maximum certificated takeoff weight of more than 75,000 pounds that were owned or leased by the air carrier on November 5, 1990, regardless of whether such airplanes were operated by that air carrier or foreign air carrier on that date.

(3) For operations conducted between the State of Hawaii and a point outside the contiguous United States—

(i) The number of Stage 2 airplanes used to conduct such operations as of November 5, 1990; and

(ii) Any change to that number during the calendar year being reported, including the date of such change.

[(d) Reports or amended reports for years predating this regulation are required to be filed concurrently with the next annual report.]

[(Amdt. 91-252, Eff. 1/15/97)]

**§§ 91.879 — 91.899 [Reserved]**



**§ 91.901 [Reserved]****§ 91.903 Policy and procedures.**

(a) The Administrator may issue a certificate of waiver authorizing the operation of aircraft in deviation from any rule listed in this subpart if the Administrator finds that the proposed operation can be safely conducted under the terms of that certificate of waiver.

(b) An application for a certificate of waiver under this part is made on a form and in a manner prescribed by the Administrator and may be submitted to any FAA office.

(c) A certificate of waiver is effective as specified in that certificate of waiver.

**§ 91.905 List of rules subject to waivers.**

Sec	
91.107	Use of safety belts.
91.111	Operating near other aircraft.
91.113	Right-of-way rules: Except water operations.
91.115	Right-of-way rules: Water operations.
91.117	Aircraft speed.
91.119	Minimum safe altitudes: General.
91.121	Altimeter settings.
91.123	Compliance with ATC clearances and instructions.
91.125	ATC light signals.
<b>[91.126]</b>	<b><i>Operating on or in the vicinity of an airport in Class G airspace.</i></b>
91.127	Operating on or in the vicinity of an airport: General rules.
<b>[91.127]</b>	<b><i>Operating on or in the vicinity of an airport in Class E airspace.</i></b>
91.129	Operating at airports with operating control towers.
<b>[91.129]</b>	<b><i>[Operations in Class D airspace.]</i></b>
<b>[91.130]</b>	<b><i>Operations in Class C airspace.</i></b>
91.131	Terminal control areas.
<b>[91.131]</b>	<b><i>Operations in Class B airspace.</i></b>
91.133	Restricted and prohibited areas.

Sec	
91.135	Positive control areas and route segments.
<b>[91.135]</b>	<b><i>Operations in Class A airspace.</i></b>
91.137	Temporary flight restrictions.
91.141	Flight restrictions in the proximity of the Presidential and other parties.
91.143	Flight limitation in the proximity of space flight operations.
91.153	VFR flight plan: Information required.
91.155	Basic VFR weather minimums
91.157	Special VFR weather minimums.
91.159	VFR cruising altitude or flight level.
91.169	IFR flight plan: Information required.
91.173	ATC clearance and flight plan required.
91.175	Takeoff and landing under IFR.
91.177	Minimum altitudes for IFR operations.
91.179	IFR cruising altitude or flight level.
91.181	Course to be flown.
91.183	IFR radio communications.
91.185	IFR operations: Two-way radio communications failure.
91.187	Operation under IFR in controlled airspace: Malfunction reports.
91.209	Aircraft lights.
91.303	Aerobatic flights.
91.305	Flight test areas.
91.311	Towing: Other than under § 91.309
91.313(e)	Restricted category civil aircraft: Operating limitations.
91.515	Flight altitude rules.
91.705	Operations within the North Atlantic Minimum Navigation Performance Specifications Airspace.
91.707	Flights between Mexico or Canada and the United States.
91.713	Operation of civil aircraft of Cuban registry.

**[(Amdt. 91-227, Eff. 9/16/93)]**

**§§ 91.907 —**

**91.999 [Reserved]**





# Appendix A—Category II Operations: Manual, Instruments, Equipment, and Maintenance

## 1. Category II Manual

(a) *Application for approval.* An applicant for approval of a Category II manual or an amendment to an approved Category II manual must submit the proposed manual or amendment to the Flight Standards District Office having jurisdiction of the area in which the applicant is located. If the application requests an evaluation program, it must include the following:

(1) The location of the aircraft and the place where the demonstrations are to be conducted; and

(2) The date the demonstrations are to commence (at least 10 days after filing the application).

(b) *Contents.* Each Category II manual must contain:

(1) The registration number, make, and model of the aircraft to which it applies;

(2) A maintenance program as specified in section 4 of this appendix; and

(3) The procedures and instructions related to recognition of decision height, use of runway visual range information, approach monitoring, the decision region (the region between the middle marker and the decision height), the maximum permissible deviations of the basic ILS indicator within the decision region, a missed approach, use of airborne low approach equipment, minimum altitude for the use of the autopilot, instrument and equipment failure warning systems, instrument failure, and other procedures, instructions, and limitations that may be found necessary by the Administrator.

## 2. Required Instruments and Equipment

The instruments and equipment listed in this section must be installed in each aircraft operated in a Category II operation. This section does not require duplication of instruments and equipment required by §91.205 or any other provisions of this chapter.

(a) *Group I.*

(1) Two localizer and glide slope receiving systems. Each system must provide a basic ILS display and each side of the instrument panel must have a basic ILS display. However, a single localizer antenna and a single glide slope antenna may be used.

(2) A communications system that does not affect the operation of at least one of the ILS systems.

(3) A marker beacon receiver that provides distinctive aural and visual indications of the outer and the middle markers.

(4) Two gyroscopic pitch and bank indicating systems.

(5) Two gyroscopic direction indicating systems.

(6) Two airspeed indicators.

(7) Two sensitive altimeters adjustable for barometric pressure, each having a placarded correction for altimeter scale error and for the wheel height of the aircraft. After June 26, 1979, two sensitive altimeters adjustable for barometric pressure, having markings at 20-foot intervals and each having a placarded correction for altimeter scale error and for the wheel height of the aircraft.

(8) Two vertical speed indicators.

(9) A flight control guidance system that consists of either an automatic approach coupler or a flight director system. A flight director system must display computed information as steering command in relation to an ILS localizer and, on the same instrument, either computed information as pitch command in relation to an ILS glide slope or basic ILS glide slope information. An automatic approach coupler must provide at least automatic steering in relation to an ILS localizer. The flight control guidance system may be operated from one of the receiving systems required by subparagraph (1) of this paragraph.

(10) For Category II operations with decision heights below 150 feet either a marker beacon receiver providing aural and visual indications of the inner marker or a radio altimeter.

(b) *Group II.*

(2) Dual controls.

(3) An externally vented static pressure system with an alternate static pressure source.

(4) A windshield wiper or equivalent means of providing adequate cockpit visibility for a safe visual transition by either pilot to touchdown and rollout.

(5) A heat source for each airspeed system pitot tube installed or an equivalent means of preventing malfunctioning due to icing of the pitot system.

### 3. Instruments and Equipment Approval

(a) *General.* The instruments and equipment required by section 2 of this appendix must be approved as provided in this section before being used in Category II operations. Before presenting an aircraft for approval of the instruments and equipment, it must be shown that since the beginning of the 12th calendar month before the date of submission—

(1) The ILS localizer and glide slope equipment were bench checked according to the manufacturer's instructions and found to meet those standards specified in RTCA Paper 23 63/DO 117 dated March 14, 1963, "Standard Adjustment Criteria for Airborne Localizer and Glide Slope Receivers," which may be obtained from the RTCA Secretariat, 1425 K St., NW., Washington, DC 20005.

(2) The altimeters and the static pressure systems were tested and inspected in accordance with Appendix E to Part 43 of this chapter; and

(3) All other instruments and items of equipment specified in section 2(a) of this appendix that are listed in the proposed maintenance program were bench checked and found to meet the manufacturer's specifications.

(b) *Flight control guidance system.* All components of the flight control guidance system must be approved as installed by the evaluation program specified in paragraph (e) of this section if they have not been approved for Category III operations under applicable type or supplemental type certification procedures. In addition, subsequent changes to make, model, or design of the components must be approved under this paragraph. Related systems or devices, such as the autothrottle and computed missed approach guidance system,

(1) it must display to the flight crew clearly and positively the wheel height of the main landing gear above the terrain.

(2) It must display wheel height above the terrain to an accuracy of plus or minus 5 feet or 5 percent, whichever is greater, under the following conditions:

(i) Pitch angles of zero to plus or minus 5 degrees about the mean approach attitude.

(ii) Roll angles of zero to 20 degrees in either direction.

(iii) Forward velocities from minimum approach speed up to 200 knots.

(iv) Sink rates from zero to 15 feet per second at altitudes from 100 to 200 feet.

(3) Over level ground, it must track the actual altitude of the aircraft without significant lag or oscillation.

(4) With the aircraft at an altitude of 200 feet or less, any abrupt change in terrain representing no more than 10 percent of the aircraft's altitude must not cause the altimeter to unlock, and indicator response to such changes must not exceed 0.1 seconds and, in addition, if the system unlocks for greater changes, it must reacquire the signal in less than 1 second.

(5) Systems that contain a push-to-test feature must test the entire system (with or without an antenna) at a simulated altitude of less than 500 feet.

(6) The system must provide to the flight crew a positive failure warning display any time there is a loss of power or an absence of ground return signals within the designed range of operating altitudes.

(d) *Other instruments and equipment.* All other instruments and items of equipment required by § 2 of this appendix must be capable of performing as necessary for Category II operations. Approval is also required after each subsequent alteration to these instruments and items of equipment.

(e) *Evaluation program—*

(1) *Application.* Approval by evaluation is requested as a part of the application for approval of the Category II manual.

(2) *Demonstrations.* Unless otherwise authorized by the Administrator, the evaluation program for each aircraft requires the demonstrations specified in this paragraph. At least 50 ILS

height and 90 percent of the total approaches made must be successful. A successful approach is one in which—

(i) At the 100-foot decision height, the indicated airspeed and heading are satisfactory for a normal flare and landing (speed must be plus or minus 5 knots of programmed airspeed, but may not be less than computed threshold speed if autothrottles are used);

(ii) The aircraft at the 100-foot decision height, is positioned so that the cockpit is within, and tracking so as to remain within, the lateral confines of the runway extended;

(iii) Deviation from glide slope after leaving the outer marker does not exceed 50 percent of full-scale deflection as displayed on the ILS indicator;

(iv) No unusual roughness or excessive attitude changes occur after leaving the middle marker; and

(v) In the case of an aircraft equipped with an approach coupler, the aircraft is sufficiently in trim when the approach coupler is disconnected at the decision height to allow for the continuation of a normal approach and landing.

(3) *Records.* During the evaluation program the following information must be maintained by the applicant for the aircraft with respect to each approach and made available to the Administrator upon request:

(i) Each deficiency in airborne instruments and equipment that prevented the initiation of an approach.

(ii) The reasons for discontinuing an approach, including the altitude above the runway at which it was discontinued.

(iii) Speed control at the 100-foot decision height if auto throttles are used.

(iv) Trim condition of the aircraft upon disconnecting the auto coupler with respect to continuation to flare and landing.

(v) Position of the aircraft at the middle marker and at the decision height indicated both on a diagram of the basic ILS display and a diagram of the runway extended to the middle marker. Estimated touchdown point must be indicated on the runway diagram.

ous tendencies have been displayed or are otherwise known to exist, the system is approved as installed.

#### **4. Maintenance program**

(a) Each maintenance program must contain the following:

(1) A list of each instrument and item of equipment specified in § 2 of this appendix that is installed in the aircraft and approved for Category II operations, including the make and model of those specified in § 2(a).

(2) A schedule that provides for the performance of inspections under subparagraph (5) of this paragraph within 3 calendar months after the date of the previous inspection. The inspection must be performed by a person authorized by part 43 of this chapter, except that each alternate inspection may be replaced by a functional flight check. This functional flight check must be performed by a pilot holding a Category II pilot authorization for the type aircraft checked.

(3) A schedule that provides for the performance of bench checks for each listed instrument and item of equipment that is specified in section 2(a) within 12 calendar months after the date of the previous bench check.

(4) A schedule that provides for the performance of a test and inspection of each static pressure system in accordance with appendix E to part 43 of this chapter within 12 calendar months after the date of the previous test and inspection.

(5) The procedures for the performance of the periodic inspections and functional flight checks to determine the ability of each listed instrument and item of equipment specified in section 2(a) of this appendix to perform as approved for Category II operations including a procedure for recording functional flight checks.

(6) A procedure for assuring that the pilot is informed of all defects in listed instruments and items of equipment.

(7) A procedure for assuring that the condition of each listed instrument and item of equipment upon which maintenance is performed is at least equal to its Category II approval condition before it is returned to service for Category II operations.

equipment.

(b) *Bench check.* A bench check required by this section must comply with this paragraph.

(1) It must be performed by a certificated repair station holding one of the following ratings as appropriate to the equipment checked:

(i) An instrument rating.

(ii) A radio rating.

(iii) A rating issued under subpart D of part 145 of this chapter.

(2) It must consist of removal of an instrument or item of equipment and performance of the following:

(iii) Calibration to at least the manufacturer's specifications unless otherwise specified in the approved Category II manual for the aircraft in which the instrument or item of equipment is installed.

(c) *Extensions.* After the completion of one maintenance cycle of 12 calendar months, a request to extend the period for checks, tests, and inspections is approved if it is shown that the performance of particular equipment justifies the requested extension.

**Section 1. Application**

(a) An applicant for an authorization to exceed Mach 1 must apply in a form and manner prescribed by the Administrator and must comply with this appendix.

(b) In addition, each application for an authorization to exceed Mach 1 covered by section 2(a) of this appendix must contain all information requested by the Administrator necessary to assist him in determining whether the designation of a particular test area or issuance of a particular authorization is a "major Federal action significantly affecting the quality of the human environment" within the meaning of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq. ), and to assist him in complying with that act and with related Executive Orders, guidelines, and orders prior to such action.

(c) In addition, each application for an authorization to exceed Mach 1 covered by section 2(a) of this appendix must contain—

(1) Information showing that operation at a speed greater than Mach 1 is necessary to accomplish one or more of the purposes specified in section 2(a) of this appendix, including a showing that the purpose of the test cannot be safely or properly accomplished by overocean testing;

(2) A description of the test area proposed by the applicant, including an environmental analysis of that area meeting the requirements of paragraph (b) of this section; and

(3) Conditions and limitations that will ensure that no measurable sonic boom overpressure will reach the surface outside of the designated test area.

(d) An application is denied if the Administrator finds that such action is necessary to protect or enhance the environment.

**Section 2. Issuance**

(a) For a flight in a designated test area, an authorization to exceed Mach 1 may be issued when the Administrator has taken the environmental protective actions specified in section 1(b) of this

appendix and the applicant shows one or more of the following:

(1) The flight is necessary to show compliance with airworthiness requirements.

(2) The flight is necessary to determine the sonic boom characteristics of the airplane or to establish means of reducing or eliminating the effects of sonic boom.

(3) The flight is necessary to demonstrate the conditions and limitations under which speeds greater than a true flight Mach number of 1 will not cause a measurable sonic boom overpressure to reach the surface.

(b) For a flight outside of a designated test area, an authorization to exceed Mach 1 may be issued if the applicant shows conservatively under paragraph (a)(3) of this section that—

(1) The flight will not cause a measurable sonic boom overpressure to reach the surface when the aircraft is operated under conditions and limitations demonstrated under paragraph (a)(3) of this section; and

(2) Those conditions and limitations represent all foreseeable operating conditions.

**Section 3. Duration**

(a) An authorization to exceed Mach 1 is effective until it expires or is surrendered, or until it is suspended or terminated by the Administrator. Such an authorization may be amended or suspended by the Administrator at any time if the Administrator finds that such action is necessary to protect the environment. Within 30 days of notification of amendment, the holder of the authorization must request reconsideration or the amendment becomes final. Within 30 days of notification of suspension, the holder of the authorization must request reconsideration or the authorization is automatically terminated. If reconsideration is requested within the 30-day period, the amendment or suspension continues until the holder shows why the authorization should not be amended or terminated. Upon such showing, the Administrator may terminate or amend the authorization if the Administrator finds that such action is necessary to protect the environment, or



## Appendix C—Operations in the North Atlantic (NAT) Minimum Navigation Performance Specifications (MNPS) Airspace

*Section 1.* NAT MNPS airspace is that volume of airspace between [FL 285 and FL 420] extending between latitude 27 degrees north and the North Pole, bounded in the east by the eastern boundaries of control areas Santa Maria Oceanic, Shanwick Oceanic, and Reykjavik Oceanic and in the west by the western boundary of Reykjavik Oceanic Control Area, the western boundary of Gander Oceanic Control Area, and the western boundary of New York Oceanic Control Area, excluding the area west of 60 degrees west and south of 38 degrees 30 minutes north.

*Section 2.* The navigation performance capability required for aircraft to be operated in the airspace defined in section 1 of this appendix is as follows:

(a) The standard deviation of lateral track errors shall be less than 6.3 NM (11.7 Km). Standard deviation is a statistical measure of data about a mean value. The mean is zero nautical miles. The overall form of data is such that the plus and minus 1 standard deviation about the mean encompasses

approximately 68 percent of the data and plus or minus 2 deviations encompasses approximately 95 percent.

(b) The proportion of the total flight time spent by aircraft 30 NM (55.6 Km) or more off the cleared track shall be less than  $5.3 \times 10^{-4}$  (less than 1 hour in 1,887 flight hours).

(c) The proportion of the total flight time spent by aircraft between 50 NM and 70 NM (92.6 Km and 129.6 Km) off the cleared track shall be less than  $13 \times 10^{-5}$  (less than 1 hour in 7,693 flight hours.)

*Section 3.* Air traffic control (ATC) may authorize an aircraft operator to deviate from the requirements of § 91.705 for a specific flight if, at the time of flight plan filing for that flight, ATC determines that the aircraft may be provided appropriate separation and that the flight will not interfere with, or impose a burden upon, the operations of other aircraft which meet the requirements of § 91.705. [(Amdt. 91-254, Eff. 4/9/97)]





## **Airports/Locations: Special Operating Restrictions**

Section 1. Locations at which the requirements of § 91.215(b)(2) apply.

The requirements of § 91.215(b)(2) apply below 10,000 feet above the surface within 30-nautical-mile radius of each location in the following list:

Atlanta, GA (The William B. Hartsfield Atlanta International Airport)

Baltimore, MD (Baltimore Washington International Airport)

Boston, MA (General Edward Lawrence Logan International Airport)

Chantilly, VA (Washington Dulles International Airport)

Charlotte, NC (Charlotte/Douglas International Airport)

Chicago, IL (Chicago-O'Hare International Airport)

Cleveland, OH (Cleveland-Hopkins International Airport)

Dallas, TX (Dallas/Fort Worth Regional Airport)

Denver, CO ([Denver] International Airport)

Detroit, MI (Metropolitan Wayne County Airport)

Honolulu, HI (Honolulu International Airport)

Houston, TX (Houston Intercontinental Airport)

Kansas City, KS (Mid-Continent International Airport)

Las Vegas, NV (McCarran International Airport)

Los Angeles, CA (Los Angeles International Airport)

Memphis, TN (Memphis International Airport)

Miami, FL (Miami International Airport)

Minneapolis, MN (Minneapolis-St. Paul International Airport)

Newark, NJ (Newark International Airport)

New Orleans, LA (New Orleans International Airport-Moisant Field)

New York, NY (John F. Kennedy International Airport)

New York, NY (LaGuardia Airport)

Orlando, FL (Orlando International Airport)

Philadelphia, PA (Philadelphia International Airport)

Phoenix, AZ (Phoenix Sky Harbor International Airport)

Pittsburgh, PA (Greater Pittsburgh International Airport)

St. Louis, MO (Lambert-St. Louis International Airport)

Salt Lake City, UT (Salt Lake City International Airport)

San Diego, CA (San Diego International Airport)

San Francisco, CA (San Francisco International Airport)

Seattle, WA (Seattle-Tacoma International Airport)

Tampa, FL (Tampa International Airport)

Washington, DC (Washington National Airport)

Section 2. Airports at which the requirements of § 91.215(b)(5)(ii) apply.

The requirements of § 91.215(b)(5)(ii) apply to operations in the vicinity of each of the following airports:

Billings, MT (Logan International Airport)

Section 3. Locations at which fixed-wing Special VFR operations are prohibited.

The Special VFR weather minimums of § 91.157 do not apply to the following airports:

Atlanta, GA (The William B. Hartsfield Atlanta International Airport)

Baltimore, MD (Baltimore/Washington International Airport)

Boston, MA (General Edward Lawrence Logan International Airport)

Buffalo, NY (Greater Buffalo International Airport)

Chicago, IL (Chicago-O'Hare International Airport)

Cleveland, OH (Cleveland-Hopkins International Airport)

Dallas, TX (Love Field)  
 Denver, CO (【Denver】 International Airport)  
 Detroit, MI (Metropolitan Wayne County Air-  
 port)  
 Honolulu, HI (Honolulu International Airport)  
 Houston, TX (Houston Intercontinental Air-  
 port)  
 Indianapolis, IN (Indianapolis International  
 Airport)  
 Los Angeles, CA (Los Angeles International  
 Airport)  
 Louisville, KY (Standiford Field)  
 Memphis, TN (Memphis International Airport)  
 Miami, FL (Miami International Airport)  
 Minneapolis, MN (Minneapolis-St. Paul Inter-  
 national Airport)  
 Newark, NJ (Newark International Airport)  
 New York, NY (John F. Kennedy International  
 Airport)  
 New York, NY (LaGuardia Airport)  
 New Orleans, LA (New Orleans International  
 Airport-Moisant Field)  
 Philadelphia, PA (Philadelphia International  
 Airport)  
 Pittsburgh, PA (Greater Pittsburgh International  
 Airport)  
 Portland, OR (Portland International Airport)  
 San Francisco, CA (San Francisco International  
 Airport)  
 Seattle, WA (Seattle-Tacoma International Air-  
 port)

activity is not permitted.

Pursuant to §91.131(b)(2), solo student pilot operations are not permitted at any of the following airports:

Atlanta, GA (The William B. Hartsfield  
 Atlanta International Airport)  
 Boston, MA (General Edward Lawrence Logan  
 International Airport)  
 Chicago, IL (Chicago-O'Hare International  
 Airport)  
 Dallas, TX (Dallas/Fort Worth Regional Air-  
 port)  
 Los Angeles, CA (Los Angeles International  
 Airport)  
 Miami, FL (Miami International Airport)  
 Newark, NJ (Newark International Airport)  
 New York, NY (John F. Kennedy International  
 Airport)  
 New York, NY (LaGuardia Airport)  
 San Francisco, CA (San Francisco International  
 Airport)  
 Washington, DC (Washington National Air-  
 port)  
 Andrews Air Force Base, MD

(Amdt. 91-217, Eff. 7/23/90); (Amdt. 91-227, Eff.  
 9/16/93); (Amdt. 91-235, Eff. 10/5/93); (Amdt. 91-  
 236 & 91-237, Eff. 3/9/94 and Amdt. 91-238, Eff.  
 5/15/94); (Amdt. 91-241 delays effective date of  
 name change indefinitely.); 【(Amdt. 91-243, Eff.  
 2/28/95)】

Parameters	Range	Installed system <sup>1</sup> minimum accuracy (to recovered data)	Sampling interval (per second)	Resolution <sup>4</sup> read out
Relative Time (From Recorded on Prior to Takeoff).	8 hr minimum	±0.125% per hour	1	1 sec.
Indicated Airspeed ...	V <sub>so</sub> to V <sub>D</sub> (KIAS)	±5% or ±10 kts., whichever is greater. Resolution 2 kts. below 175 KIAS	1	1% <sup>3</sup>
Altitude .....	-1,000 ft. to max cert. alt. of A/C	±100 to ±700 ft. (see Table 1, TSO C51-a)	1	25 to 150 ft.
Magnetic Heading ....	360°	±5°	1	1½
Vertical Acceleration	-3g to +6g	±0.2g in addition to ±0.3g maximum datum	4 (or 1 per second where peaks, ref. to 1g are recorded)	0.03g.
Longitudinal Acceleration.	±1.0g	±1.5% max. range excluding datum error of ±5%	2	0.01g.
Pitch Attitude .....	100% of usable	±2°	1	0.8°
Roll Attitude .....	±60° or 100% of usable range, whichever is greater	±2°	1	0.8°
Stabilizer Trim Position, or.	Full Range	±3% unless higher uniquely required	1	1% <sup>3</sup>
Pitch Control Position.	Full Range  Maximum Range	±3% unless higher uniquely required ±5%	1	1% <sup>3</sup>
Engine Power, Each Engine:			1	1% <sup>3</sup>
Fan or N1 Speed or EPR or Cockpit indications Used for Aircraft Certification OR.			1	1% <sup>3</sup>
Prop. speed and Torque (Sample Once/Sec as Close together as Practicable).			1 (prop Speed) 1 (torque)	1% <sup>3</sup> 1% <sup>3</sup>

depends on altitude resolution).		ipm below 12,000 ft. indicated		12,000
Angle of Attack <sup>2</sup> (need depends on altitude resolution).	-20° to 40° or 100% of usable range	±2°	1	0.8% <sup>3</sup>
Radio Transmitter Keying (Discrete).	On/Off		1	
TE Flaps (Discrete or Analog).	Each discrete position (U, D, T/O, AAP) OR		1	
LE Flaps (Discrete or Analog).	Analog 0-100% range	±3°	1	1% <sup>3</sup>
	Each discrete position (U, D, T/O, AAP) OR		1	
Thrust Reverser, Each Engine (Discrete).	Analog 0-100% range Stowed or full reverse	±3°	1	1% <sup>3</sup>
Spoiler/Speedbrake (Discrete).	Stowed or out		1	
Autopilot Engaged (Discrete).	Engaged or Disengaged		1	

<sup>1</sup> When data sources are aircraft instruments (except altimeters) of acceptable quality to fly the aircraft the recording system excluding these sensors (but including all other characteristics of the recording system) shall contribute no more than half of the values in this column.

<sup>2</sup> If data from the altitude encoding altimeter (100 ft. resolution) is used, then either one of these parameters should also be recorded. If however, altitude is recorded at a minimum resolution of 25 feet, then these two parameters can be omitted.

<sup>3</sup> Per cent of full range.

<sup>4</sup> This column applies to aircraft manufactured after October 11, 1991.

Parameters	Range	Installed system <sup>1</sup> minimum accuracy (to recovered data)	Sampling interval (per second)	Resolution <sup>3</sup> read out
Relative Time (From Recorded on Prior to Takeoff).	4 hr minimum	±0.125% per hour	1	1 sec.
Indicated Airspeed ...	VM in to VD (KIAS) (minimum airspeed signal attainable with installed pilot-static system)	±5% or ±10 kts., whichever is greater	1	1 kt.
Altitude .....	-1,000 ft. to 20,000 ft. pressure altitude	±100 to ±700 ft. (see Table 1, TSO C51-a)	1	25 to 150 ft.
Magnetic Heading ....	360°	±5°	1	1°
Vertical Acceleration	-3g to +6g	±0.2g in addition to ±0.3g maximum datum	4 (or 1 per second where peaks, ref. to 1g are recorded)	0.05g.
Longitudinal Acceleration.	±1.0g	±1.5% max. range excluding datum error of ±5%	2	0.03g.
Pitch Attitude .....	100% of usable range	±2°	1	0.8°
Roll Attitude .....	±60 or 100% of usable range, whichever is greater	±2°	1	0.8°
Altitude Rate .....	±8,000 fpm	±10% Resolution 250 fpm below 12,000 ft. indicated	1	250 fpm below 12,000.
<i>Engine Power, Each Engine</i>				
Main Rotor Speed ....	Maximum Range	±5%	1	1% <sup>2</sup>
Free or Power Turbine.	Maximum Range	±5%	1	1% <sup>2</sup>
Engine Torque .....	Maximum Range	±5%	1	1% <sup>2</sup>
<i>Flight Control Hydraulic Pressure</i>				
Primary (Discrete) ....	High/Low		1	

Radio Transmitter Keying (Discrete).	On/Off		1	
Autopilot Engaged (Discrete).	Engaged or Disengaged		1	
SAS Status—Engaged (Discrete).	Engaged or Disengaged		1	
SAS Fault Status (Discrete).	Fault/OK		1	
<i>Flight Controls</i>				
Collective .....	Full range	±3%	2	1% <sup>2</sup>
Pedal Position .....	Full range	±3%	2	1% <sup>2</sup>
Lat. Cyclic .....	Full range	±3%	2	1% <sup>2</sup>
Long. Cyclic .....	Full range	±3%	2	1% <sup>2</sup>
Controllable Stabilator Position.	Full range	±3%	2	1% <sup>2</sup>

<sup>1</sup> When data sources are aircraft instruments (except altimeters) of acceptable quality to fly the aircraft the recording system excluding these sensors (but including all other characteristics of the recording system) shall contribute no more than half of the values in this column.

<sup>2</sup> Per cent of full range.

<sup>3</sup> This column applies to aircraft manufactured after October 11, 1991.

# **[Appendix G—Operations in Reduced Vertical Separation Minimum (RVSM) Airspace]**

## **[Section 1. Definitions.]**

**Reduced Vertical Separation Minimum (RVSM) Airspace.** Within RVSM airspace, air traffic control (ATC) separates aircraft by a minimum of 1,000 feet vertically between flight level (FL) 290 and FL 410 inclusive. RVSM airspace is special qualification airspace; the operator and the aircraft used by the operator must be approved by the Administrator. Air-traffic control notifies operators of RVSM by providing route planing information. Section 8 of this appendix identifies airspace where RVSM may be applied.

**RVSM Group Aircraft.** Aircraft within a group of aircraft, approved as a group by the Administrator, in which each of the aircraft satisfy each of the following:

(a) The aircraft have been manufactured to the same design, and have been approved under the same type certificate, amended type certificate, or supplemental type certificate.

(b) The static system of each aircraft is installed in a manner and position that is the same as those of the other aircraft in the group. The same static source error correction is incorporated in each aircraft of the group.

(c) The avionics units installed in each aircraft to meet the minimum RVSM equipment requirements of this appendix are:

(1) Manufactured to the same manufacturer specification and have the same part number; or

(2) Of a different manufacturer or part number, if the applicant demonstrates that the equipment provides equivalent system performance.

**RVSM Nongroup Aircraft.** An aircraft that is approved for RVSM operations as an individual aircraft.

**RVSM Flight Envelope.** An RVSM flight envelope includes the range of Mach number, weight divided by atmospheric pressure ratio, and altitudes over which an aircraft is approved to be operated in cruising flight within RVSM airspace. RVSM flight envelopes are defined as follows:

(a) The *full RVSM flight envelope* is bounded as follows:

(1) The altitude flight envelope extends from FL 290 upward to the lowest altitude of the following:

(i) FL 410 (the RVSM altitude limit);

(ii) The maximum certificated altitude for the aircraft; or

(iii) The altitude limited by cruise thrust, buffet, or other flight limitations.

(2) The airspeed flight envelope extends:

(i) From the airspeed of the slats/flaps-up maximum endurance (holding) airspeed, or the maneuvering airspeed, whichever is lower;

(ii) To the maximum operating airspeed ( $V_{mo}/M_{mo}$ ), or airspeed limited by cruise thrust, buffet, or other flight limitations, whichever is lower.

(3) All permissible gross weights within the flight envelopes defined in paragraphs (1) and (2) of this definition.

(b) The *basic RVSM flight envelope* is the same as the full RVSM flight envelope except that the airspeed flight envelope extends:

(1) From the airspeed of the slats/flaps-up maximum endurance (holding) airspeed, or the maneuver airspeed, whichever is lower;

(2) To the upper Mach/airspeed boundary defined for the full RVSM flight envelope, or a specified lower value not less than the long-range cruise Mach number plus .04 Mach, unless further limited by available cruise thrust, buffet, or other flight limitations.

## **[Section 2. Aircraft Approval.]**

(a) An operator may be authorized to conduct RVSM operations if the Administrator finds that its aircraft comply with this section.

(b) The applicant for authorization shall submit the appropriate data package for aircraft approval. The package must consist of at least the following:

(1) An identification of the RVSM aircraft group or the nongroup aircraft;

(2) A definition of the RVSM flight envelopes applicable to the subject aircraft;

(c) *Altitude-keeping equipment: All aircraft.* To approve an aircraft group or a nongroup aircraft, the Administrator must find that the aircraft meets the following requirements:

(1) The aircraft must be equipped with two operational independent altitude measurement systems.

(2) The aircraft must be equipped with at least one automatic altitude control system that controls the aircraft altitude—

(i) Within a tolerance band of  $\pm 65$  feet about an acquired altitude when the aircraft is operated in straight and level flight under nonturbulent, nongust conditions; or

(ii) Within a tolerance band of  $\pm 130$  feet under nonturbulent, nongust conditions for aircraft for which application for type certification occurred on or before April 9, 1997 that are equipped with an automatic altitude control system with flight management/performance system inputs.

(3) The aircraft must be equipped with an altitude alert system that signals an alert when the altitude displayed to the flight crew deviates from the selected altitude by more than:

(i)  $\pm 300$  feet for aircraft for which application for type certification was made on or before April 9, 1997; or

(ii)  $\pm 200$  feet for aircraft for which application for type certification is made after April 9, 1997.

(d) *Altitude system error containment: Group aircraft for which application for type certification was made on or before April 9, 1997.* To approve group aircraft for which application for type certification was made on or before April 9, 1997, the Administrator must find that the altitude system error (ASE) is contained as follows:

(1) At the point in the basic RVSM flight envelope where mean ASE reaches its largest absolute value, the absolute value may not exceed 80 feet.

(2) At the point in the basic RVSM flight envelope where mean ASE plus three standard deviations reaches its largest absolute value, the absolute value may not exceed 200 feet.

deviations reaches its largest absolute value, the absolute value may not exceed 245 feet.

(5) *Necessary operating restrictions.* If the applicant demonstrates that its aircraft otherwise comply with the ASE containment requirements, the Administrator may establish an operating restriction on that applicant's aircraft to restrict the aircraft from operating in areas of the basic RVSM flight envelope where the absolute value of mean ASE exceeds 80 feet, and/or the absolute value of mean ASE plus three standard deviations exceeds 200 feet; or from operating in areas of the full RVSM flight envelope where the absolute value of the mean ASE exceeds 120 feet and/or the absolute value of the mean ASE plus three standard deviations exceeds 245 feet.

(e) *Altitude system error containment: Group aircraft for which application for type certification is made after April 9, 1997.* To approve group aircraft for which application for type certification is made after April 9, 1997, the Administrator must find that the altitude system error (ASE) is contained as follows:

(1) At the point in the full RVSM flight envelope where mean ASE reaches its largest absolute value, the absolute value may not exceed 80 feet.

(2) At the point in the full RVSM flight envelope where mean ASE plus three standard deviations reaches its largest absolute value, the absolute value may not exceed 200 feet.

(f) *Altitude system error containment: Nongroup aircraft.* To approve a nongroup aircraft, the Administrator must find that the altitude system error (ASE) is contained as follows:

(1) For each condition in the basic RVSM flight envelope, the largest combined absolute value for residual static source error plus the avionics error may not exceed 160 feet.

(2) For each condition in the full RVSM flight envelope, the largest combined absolute value for residual static source error plus the avionics error may not exceed 200 feet.

(g) If the Administrator finds that the applicant's aircraft comply with this section, the Administrator notifies the applicant in writing.



aircraft have been approved in accordance with Section 2 of this appendix and that the operator complies with this section.

(b) An applicant for authorization to operate within RVSM airspace shall apply in a form and manner prescribed by the Administrator. The application must include the following:

(1) An approved RVSM maintenance program outlining procedures to maintain RVSM aircraft in accordance with the requirements of this appendix. Each program must contain the following:

(i) Periodic inspections, functional flight tests, and maintenance and inspection procedures, with acceptable maintenance practices, for ensuring continued compliance with the RVSM aircraft requirements.

(ii) A quality assurance program for ensuring continuing accuracy and reliability of test equipment used for testing aircraft to determine compliance with the RVSM aircraft requirements.

(iii) Procedures for returning noncompliant aircraft to service.

(2) For an applicant who operates under part 121 or 135, initial and recurring pilot training requirements.

(3) Policies and Procedures. An applicant who operates under part 121 or 135 shall submit RVSM policies and procedures that will enable it to conduct RVSM operations safely.

(c) Validation and Demonstration. In a manner prescribed by the Administrator, the operator must provide evidence that:

(1) It is capable to operate and maintain each aircraft or aircraft group for which it applies for approval to operate in RVSM airspace; and

(2) Each pilot has an adequate knowledge of RVSM requirements, policies, and procedures.

#### **[Section 4. RVSM Operations.**

(a) Each person requesting a clearance to operate within RVSM airspace shall correctly annotate the flight plan filed with air traffic control with the status of the operator and aircraft with regard to RVSM approval. Each operator shall verify RVSM

required, unless:

(1) The operator is authorized by the Administrator to perform such operations; and

(2) The aircraft has been approved and complies with the requirements of Section 2 of this appendix.

#### **[Section 5. Deviation Authority Approval.**

The Administrator may authorize an aircraft operator to deviate from the requirements of § 91.706 for a specific flight in RVSM airspace if that operator has not been approved in accordance with Section 3 of this appendix, and if:

(a) The operator submits an appropriate request with the air traffic control center controlling the airspace, (request should be made at least 48 hours in advance of the operation unless prevented by exceptional circumstances); and

(b) At the time of filing the flight plan for that flight, ATC determines that the aircraft may be provided appropriate separation and that the flight will not interfere with, or impose a burden on, the operations of operators who have been approved for RVSM operations in accordance with Section 3 of this appendix.

#### **[Section 6. Reporting Altitude-Keeping Errors.**

Each operator shall report to the Administrator each event in which the operator's aircraft has exhibited the following altitude-keeping performance:

(a) Total vertical error of 300 feet or more;

(b) Altimetry system error of 245 feet or more; or

(c) Assigned altitude deviation of 300 feet or more.

#### **[Section 7. Removal or Amendment of Authority.**

The Administrator may amend operations specifications to revoke or restrict an RVSM authorization, or may revoke or restrict an RVSM letter of authorization, if the Administrator determines that the operator is not complying, or is unable to comply, with this appendix or subpart H of this part. Examples of reasons for amendment, revoca-

error; or

- (c) Failing to report an altitude-keeping error.

**[Section 8. Airspace Designation.]**

RVSM may be applied in the following ICAO Flight Information Regions (FIR's): New York Oceanic, Gander Oceanic, Sondrestrom FIR, Reykjavik Oceanic, Shanwick Oceanic, and Santa Maria Oceanic.

the eastern boundaries of control areas Santa Maria Oceanic, Shanwick Oceanic, and Reykjavik Oceanic and in the west by the western boundaries of control areas Reykjavik Oceanic, Gander Oceanic, and New York Oceanic, excluding the areas west of 60 degrees west and south of 38 degrees 30 minutes north.]

**[(Amdt. 91-254, Eff. 4/9/97)]**

(SFAR) No. 29-3, which allows limited operations under instrument flight rules (IFR) of certain normal and transport category rotorcraft that are limited by their type certificates to operations under visual flight rules (VFR). The extension is necessary to prevent imposing any economic burden upon those operators already authorized, equipped, and qualified to conduct operations under SFAR No. 29, which would occur if SFAR 29-3 were permitted to terminate before Amendment No. 1 of the Rotorcraft Regulatory Review Program is issued and effective.

**FOR FURTHER INFORMATION CONTACT:** Mike Sacrey or Win Karish; Operations Branch (AFO-820); General Aviation & Commercial Division; Office of Flight Operations; Federal Aviation Administration; 800 Independence Ave., SW.; Washington, D.C. 20591; telephone (202) 426-8194.

## **SUPPLEMENTARY INFORMATION:**

### **Background**

Under Part 27 or Part 29 of the Federal Aviation Regulations (FAR), a rotorcraft is certificated for VFR operation only, unless it has been shown that the rotorcraft fully complies with all of the airworthiness requirements for instrument flight rules (IFR) operations. Since certain IFR operations can be safely conducted with rotorcraft that do not meet all of the present flight characteristic requirements, SFAR No. 29 was adopted by the Administrator on January 3, 1975 (40 FR 2420; January 13, 1975). SFAR No. 29 allowed the Administrator to issue approvals for such operators, on an interim basis, pending the conclusion of a study to determine whether a "limited" IFR category should be established for these rotorcraft, including flight characteristics and equipment requirements, operating procedures and limitations, flight crew requirements, and training requirements. The expiration date of SFAR No. 29, as amended by SFAR No. 29-3 (45 FR 71919; October 30, 1980), is December 31, 1982.

The FAA has established a Rotorcraft Regulatory Review Program which will involve a comprehensive review and upgrading of requirements. This program will consider the development of IFR airworthiness standards for rotorcraft certification in Parts 27 and 29 of the FAR. It will not be concluded by the December 31, 1982, termination date of SFAR No. 29-3.

### **Discussion**

If SFAR No. 29 were to expire before completing the rulemaking action generated by the Rotorcraft Regulatory Review Program, there would be no regulatory basis to allow continued IFR rotorcraft operations, thereby creating an undue burden for those operators of helicopters meeting the criteria specified in SFAR No. 29.

Pending the issuance and effectivity of new standards to be established by Amendment No. 1 of the Rotorcraft Regulatory Review Program, the FAA believes that it is in the public interest to allow continued IFR operations with certain rotorcraft that do not meet all of the present requirements of Parts 21, 27, 29, and 91 of the FAR. With the issuance of SFAR No. 29-4, operators may continue to apply for SFAR 29 approvals until Amendment No. 1 of the Rotorcraft Regulatory Review Program (Amendment No. 1) is effective. After Amendment No. 1 is effective, all applicants for certification of IFR rotorcraft operations will have to comply with the applicable provisions of that amendment. When Amendment No. 1 becomes effective, SFAR No. 29-4 (and approvals issued under SFAR Nos. 29 through 29-4) will

amendment effective in less than 30 days.

### **The Amendment**

Accordingly, Special Federal Aviation Regulation No. 29, as amended by Special Federal Aviation Regulation No. 29-3 (14 CFR Parts 21, 27, 29, and 91), is reissued and amended, effective January 1, 1983.

(Sections 313(a), 601(a), and 603 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421(a), and 1423) and section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)))

NOTE: Since this document only extends the effectivity of a current regulation and does not impose a burden on the public or aviation industry, the FAA has determined that this document involves a regulation which is not a major rule under Executive Order 12291, is not a significant rule under Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979), and does not warrant preparing a regulatory evaluation because the anticipated impact is minimal. For the same reason, I certify that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

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(b) The operator complies with all conditions and limitations established by this SFAR and the approval; and

(c) A copy of the approval and this SFAR are set forth as a supplement to the Rotorcraft Flight Manual.

2. FAA approval for the operation of a rotorcraft in limited IFR operations may be issued when the following conditions are met:

(a) The operation is approved as part of the FAA study of limited rotorcraft IFR operations.

(b) Specific FAA approval has been obtained for the following:

(i) The rotorcraft (make, model and serial number).

(ii) The flight crew.

(iii) The procedures to be followed in the operation of the rotorcraft under IFR and the equipment that must be operable during such operations.

(c) The conditions and limitations necessary for the safe operation of the rotorcraft in limited IFR operations have been established, approved, and incorporated in the operating limitations section of the Rotorcraft Flight Manual.

3. An approval issued under paragraph 2 of this Special Federal Aviation Regulation and the change to this Rotorcraft Flight Manual specified in paragraph 2(c) of this Special Federal Aviation Regulation constitute a supplemental type certificate for each rotorcraft approved under paragraph 2 of this SFAR. The supplemental type certificate will remain in effect until the approval to operate issued under the Special Federal Aviation Regulation is surrendered, revoked, or otherwise terminated.

4. Notwithstanding [§ 91.167(a)(3)] of the Federal Aviation Regulations, a person may operate a rotorcraft in a limited IFR operation approved under paragraph 2(a) of this Special Federal Aviation Regulation with enough fuel to fly, after reaching the alternate airport, for not less than 30 minutes, when that period of time has been approved.

5. Expiration.

(a) New applications for limited IFR rotorcraft operations under SFAR No. 29 may be submitted for approval until, but not including, the effective date of Amendment No. 1 of the Rotorcraft Regulatory Review Program. On and after the effective date of Amendment No. 1 of the Rotorcraft Regulatory Review Program, all applicants for certification of IFR rotorcraft operations must comply with the applicable provisions of the Federal Aviation Regulations.

(b) This Special Federal Aviation Regulation will terminate when all approvals issued under Special Federal Aviation Regulation No. 29 are surrendered, revoked, or otherwise terminated.

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**SUMMARY:** This rule requires certain commuter operators that now conduct operations under part 135 to conduct those operations under part 121. The commuter operators affected are those conducting scheduled passenger-carrying operations in airplanes that have passenger-seating configurations of 10 to 30 seats (excluding any crewmember seat) and those conducting scheduled passenger-carrying operations in turbojet airplanes regardless of seating configuration. The rule revises the requirements concerning operating certificates and operations specifications for all part 121, 125, and 135 certificate holders. The rule also requires certain management officials for all certificate holders under parts 121 and 135. The rule is intended to increase safety in scheduled passenger-carrying operations and to clarify, update, and consolidate the certification and operations requirements for persons who transport passengers or property by air for compensation or hire.

**NOTE:** Please refer to preamble pages P-1113 through P-1228 in part 121 for entire preamble.

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**Special Federal Aviation Regulation 50-2**

**Special Flight Rules in the Vicinity of Grand Canyon National Park**

**Adopted: December 24, 1996**

**Effective: May 1, 1997**

**(Published in 61 FR 69302, December 31, 1996)**

**(Corrected in 62 FR 2445, January 16, 1997)**

**SUMMARY:** This final rule is one part of an overall strategy to further reduce the impact of aircraft noise on the park environment and to assist the National Park Service in achieving its statutory mandate, imposed by Public Law 100-91, to provide for the substantial restoration of natural quiet and experience in Grand Canyon National Park. This action is issued concurrently with: a Notice of Proposed Rulemaking regarding Noise Limitations for Aircraft Operations in the Vicinity of Grand Canyon National Park; a Notice of Availability of Proposed Commercial Air Tour Routes for Grand Canyon National Park and Request for Comments; and the Environmental Assessment issued with this final rule. This action amends part 93 of the Federal Aviation Regulations by adding a new subpart to codify the provisions of Special Federal Aviation Regulation No. 50-2, Special Flight Rules in the Vicinity of Grand Canyon National Park; modifies the dimensions of the Grand Canyon National Park Special Flight Rules Area; establishes new and modifies existing flight-free zones; establishes new and modifies existing flight corridors; and establishes reporting requirements for commercial sightseeing companies operating in the Special Flight Rules Area. In addition, to provide further protection for park resources, this final rule prohibits commercial sightseeing operations in the Zuni and Dragon corridors during certain time periods, and limits the number of aircraft that can be used for commercial sightseeing operations in the Grand Canyon National Park Special Flight Rules Area.

**NOTE:** Please refer to preamble pages P-247 through P-287 in part 93 for entire preamble.

*(This regulation inadvertently removed SFAR 50-2)*

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**SUMMARY:** On December 31, 1996, the FAA published a final rule that codifies the provisions of Special Federal Aviation Regulation (SFAR) No. 50-2, Special Flight Rules in the Vicinity of Grand Canyon National Park (GCNP); modifies the dimensions of the GCNP Special Flight Rules Area; establishes new and modifies existing flight-free zones; establishes new and modifies existing flight corridors; establishes reporting requirements for commercial sightseeing companies operating in the Special Flight Rules Area; prohibits commercial sightseeing operations during certain time periods; and limits the number of aircraft that can be used for commercial sightseeing operations in the GCNP Special Flight Rules Area. This action delays the effective date for 14 CFR §§ 93.301, 93.305, and 93.307 of the final rule and reinstates portions of and amends the expiration date of SFAR No. 50-2. This action does not affect or delay the implementation of the curfew, aircraft restrictions, reporting requirements or the other portions of the rule.

**DATES:** The effective date of May 1, 1997, for 14 CFR §§ 93.301, 93.305, and 93.307, is delayed until 0901 UTC January 31, 1998. SFAR No. 50-2 is reinstated and amended effective 0901 UTC May 1, 1997. SFAR No. 50-2, Sections 2, 3, 6, 7 and 8 are removed effective 0901 UTC May 1, 1997.

Comments must be received on or before March 24, 1997.

**ADDRESSES:** Comments should be mailed, in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC-200), Docket No. 28537, 800 Independence Avenue, SW., Washington, DC 20591. Comments may be sent electronically to the Rules Docket by using the following Internet address [nprmcmts@mail.faa.dot.gov](mailto:nprmcmts@mail.faa.dot.gov). Comments must be marked Docket No. 28537. Comments may be examined in the Rules Docket in Room 915G on weekdays between 8:30 a.m. and 5:00 p.m., except on Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Mr. Neil Saunders, Airspace and Rules Division (ATA-400), Office of Air Traffic Airspace Management, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-8783.

## **SUPPLEMENTARY INFORMATION:**

### **Request for Comments on the Rule**

Although this action is a final rule, and was not preceded by notice and public procedure, comments are invited on the rule. This rule will become effective on the date specified in the "DATES" section. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in evaluating the effects of the rule, and in determining whether additional rulemaking is required.

### **History**

On December 31, 1996, the FAA published three concurrent actions (a final rule, a Notice of Proposed Rulemaking (NPRM), and a Notice of Availability of Proposed Commercial Air Tour Routes) in the *Federal Register* (62 FR 69301) as part of an overall strategy to reduce further the impact of aircraft noise on the park environment and to assist the National Park Service (NPS) in achieving its statutory mandate imposed by Public Law 100-91. The final rule amends part 93 of the Federal Aviation Regulations and adds a new subpart to codify the provisions of SFAR No. 50-2; modifies the dimensions of the GCNP Special Flight Rules



An NADRM, Notice No. 90-15, proposing to establish noise limitations for certain aircraft operating in the vicinity of GCNP was also published with a comment period that closes on March 31, 1997.

Finally, a Notice of Availability of Proposed Commercial Air Tour Routes for the GCNP was published with a 30-day comment period that closed on January 31, 1997. This Notice requested comment on the proposed new or modified existing air tour routes, which complement the final rule affecting the Special Flight Rules in the Vicinity of GCNP.

### Petitions

By petition dated January 15, 1997, the Aircraft Owners and Pilots Association requested that the FAA reconsider the rule because of its perceived negative impact on the general aviation community and the fact that general aviation traffic does not contribute to the issues addressed by the final rule.

On January 30, 1997, the Clark County Department of Aviation, et al., filed a petition seeking reconsideration and/or a stay of effectiveness of the implementation of the Toroweap/Shinumo Flight-Free Zone that will bar the use of the current "Blue 1" commercial air tour route until the FAA has taken adequate steps to assure the availability of an adequate alternative for Las Vegas based air tour operators.

On January 31, 1997, the Grand Canyon Air Tour Coalition (Coalition) requested a stay of the effective date arguing that the necessary pilot training and certification could not be reasonably and safely completed prior to the May 1, 1997, effective date. The petition also alleged that discontinuing and limiting existing tour routes as of May 1, 1997, would disrupt the travel plans of a substantial portion of GCNP visitors, and air tour operators would be forced to dishonor contractual obligations based on material printed prior to August 1996. (This administrative action is separate from but interrelated to a Petition for Review filed by the Coalition in the Court of Appeals for the District of Columbia Circuit, *Grand Canyon Air Tour Coalition v. FAA*, (Case No. 97-1003)).

On February 18, 1997, the Grand Canyon Trust, et. al., (Trust) filed a request with the FAA opposing the Coalition's request for stay of the final rule and urged the FAA to deny the Coalition's request. The Trust argued that the Coalition has not presented valid grounds to support its stay request.

Even though the specific Petitions filed with the FAA focus on different aspects of the operating environment within the Park, the underlying concepts of the three Petitions are similar in nature. All three administrative Petitions are concerned with the air tour route structure or its implementation.

In support of the requests for a stay of the effective date, the Petitions have alleged several economic and safety concerns. The economic concerns are inextricably tied with the implementation of the new routes in the Park. As will be discussed below, if the implementation of the new routes is delayed, the economic concerns are, at a minimum, also delayed. In essence, the safety concerns stem from the Petitioners' position that there is not enough time to train and certify all operators and pilots for operations on the new Grand Canyon routes that are scheduled to be in place on May 1, 1997, and that this would create an inherently unsafe situation in the Grand Canyon. The FAA strongly disagrees with this assertion that implementing the new routes effective May 1, 1997, would be unsafe. Even though the FAA is committed to achieving the substantial restoration of natural quiet in the Park as soon as possible, safety is, and always will be, paramount. To that end, the FAA has been preparing to take dramatic steps to alleviate any potential problems that could adversely affect the safety

of these creative ideas suggest alternatives to both the existing environment at the Park and the proposed environment that could significantly improve the operating situation in both the environmental and operational arenas. These new suggestions have not yet been adequately explored, but are deserving of further investigation and analysis. Additional time would afford the FAA and the Department of the Interior (DOI) an opportunity to review these new ideas. In addition, the FAA is committed to a continued working relationship with the affected Native American tribal units, and the FAA intends to complete consultation with the affected Native American tribes concerning these new route suggestions pursuant to Section 106 of the National Historic Preservation Act. Although the FAA is fully prepared to implement the new route structure on May 1, 1997, as originally proposed, it would be extremely difficult to accommodate the new proposals now being discussed by that date.

The FAA has consulted with the DOI concerning the new suggestions received by the FAA and the need for further consultation. The DOI reexamined the situation at the Park and concluded that the implementation of the curfew as required by the final rule on May 1, 1997, will, on its own, be a significant step to achieving the substantial restoration of natural quiet in the Park. The subsequent implementation of the new air tour route structure, together with the proposal of quiet technology, will form the basis for the next step towards the substantial restoration of natural quiet. The DOI and the FAA have determined that additional time would be beneficial to permit the further exploration of these new ideas submitted by the affected and interested parties, and that a delay in the effective date of the implementation of the new routes in the Park is warranted. Therefore, to permit continued discussions on, and possible changes to, the proposed new routes and to permit further consultation with the Native American tribes, the FAA has determined to delay the effective date of the expansion of the flight-free zones and minimum altitudes as stated in 14 CFR §§93.301, 93.305 and 93.307 to January 31, 1998. The effective date of May 1, 1997, for all the other aspects of the rule, i.e., the curfew, aircraft limitations, and reporting requirements, will remain unchanged.

Since the FAA is delaying certain portions of the final rule, as stated above, SFAR 50-2 must be reinstated, and certain portions of the SFAR be extended. The continuation of the SFAR is vital to maintain the existing environmental and safety benefits. Specifically, the FAA finds it necessary to amend Section 9 of the reinstated SFAR 50-2 to extend the provisions of Sections 1, 4, and 5, (i.e., the Special Flight Rules Area, the flight-free zones and the minimum flight altitudes) until January 31, 1998. The termination of SFAR 50-2 Sections 1, 4, and 5 will coincide with the delayed effective date of 14 CFR §§93.301, 93.305, and 93.307.

On May 1, 1997, the provisions of the final rule that are unaffected by the pending route structure will go into effect. These provisions consist of the curfew, aircraft limitations, and reporting requirements, and are contained in 14 CFR §§93.303, 93.309, 93.311, 93.313, 93.315, 93.316, and 93.317. To avoid redundancy and confusion, the FAA also finds it necessary to remove certain sections of SFAR 50-2 effective May 1, 1997. Sections 2, 3, 6, 7, and 8 will be removed on May 1, 1997 to coincide with the implementation of the above referenced sections of the final rule contained in part 93.

#### **Further Consultation and Review**

As mentioned above, during the comment period on the new routes, the FAA received many insightful and cogent comments on the proposed route structure. Consultation with the Native American representatives also produced several useful and valid alternate operational schemes. Many of these ideas received from the comments and through the consultations are

The FAA has determined that the responses to the proposed routes should be further analyzed prior to implementation of airspace changes. Therefore, in light of the comments and additional information received, the FAA will reexamine the proposed route structure in relation to the operating environment in the Park. The FAA expects to revisit the proposed route structure and incorporate several of the above mentioned ideas. Involvement of the interested and affected parties will be crucial in this process.

### **Notice and Comment**

As is explained below, this final rule is being issued without prior notice and comment because of the time constraints. The FAA spent the month of January and most of February receiving and reviewing comments on the proposed routes and consulting with the various affected parties. Had the FAA not received the valuable information on the route structure that it did, the FAA would have been able to transmit the data on the proposed routes to the proper charting authorities (the National Ocean Service (NOS)), and an aeronautical chart would have been available by at least April 1, 1997, that would have been used by the operators for training and navigational purposes. To have the appropriate chart produced by April 1, the FAA would have had to forward the charting data to NOS by February 21, 1997. However, once the FAA started to receive the relevant information from the commenters, the Agency had to make a determination as to whether to proceed with the proposed routes so as to have the routes and the complete Grand Canyon final rule effective and implemented on May 1, or whether to take additional time to analyze the comments and possibly develop a better and more comprehensive route structure that would not go into effect until after the busy summer tourist season.

Further, officials of the Park and NPS had suggested alterations and refinements in the route structure that have the potential to produce noise reduction benefits. They have requested the opportunity to explore these new options with the FAA. Both the FAA and the DOI believe that all these suggested changes could produce a significantly better rule for both the Park users and the aviation operators. Additional time is needed, however, to review, analyze, and implement these route changes, which, again, would preclude a May 1, 1997, effective date.

To permit what the FAA and the DOI believe will culminate in a better overall route structure, the FAA has decided not to send the originally proposed routes to NOS for charting, but to analyze the new ideas with the expectation of creating better routes. Due to the specific and strict requirements of NOS for the charting preparation time, any further alteration to the route structure, such as the ones suggested by DOI and interested parties, make it impossible to meet the charting date necessary for a May 1 effective date. A delay in the charting data to NOS would mean that NOS would not have been able to produce the charts by April 1 and, consequently, operators would not have been able to train their pilots by May 1. Essentially, therefore, any delay in sending the data to NOS results in an equivalent delay of the effective date. With the goal to produce the best routes possible, the FAA determined that it would be contrary to the public interest to implement the originally proposed routes when better alternatives might be available as a result of the comments received and the consultations with DOI and others.

Moreover, past experience has demonstrated that the training of pilots on new routes during a peak tourist season could be unsafe. At the Park, the peak season extends approximately from May through October. To eliminate the potential for unsafe operations within the Park, the FAA further determined that the training should take place in the Park when the volume of air traffic traditionally decreases, i.e., after the summer tourist season. For that reason,

In promulgating the final rule for Special Flight Rules in the Vicinity of the GCNP, the FAA prepared a cost-benefit analysis of the rule. The delay in the implementation of 14 CFR §§ 93.301 and 93.307 will not affect that assessment. The delay in the implementation of § 93.305 will be cost-relieving.

### **Regulatory Flexibility Analysis**

As required by the Regulatory Flexibility Act of 1980, as amended, FAA completed a final regulatory flexibility analysis of the final rule. The delay in the implementation of 14 CFR §§ 93.301, 93.305, and 93.307 will not have an effect on that analysis.

### **Federalism Implications**

The amendment set forth herein will not have substantial direct effects on the States, or the relationship between the national Government and the State, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this amendment does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Accordingly, the Federal Aviation Administration (FAA) amends 14 CFR parts 91, 93, 121, and 135 effective May 1, 1997.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. 106(g), 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46502, 46504, 46506–46507, 47122, 47508, 47528–47531.

### **SFAR No. 50–2 [Reinstated]**

In parts 91, 121, and 135, Special Federal Aviation Regulation No. 50–2 is reinstated, and Sections 2, 3, 6, 7, and 8 are removed.

In parts 91, 121, and 135, Special Federal Aviation Regulation No. 50–2, Section 9 is revised to read as follows:

**Section 9. Termination Date.** Section 1. *Applicability*, Section 4. *Flight-Free Zones*, and Section 5. *Minimum Flight Altitudes*, expire on 0901 UTC, January 31, 1998.

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MSL within an area bounded by a line beginning at Lat. 36°09'30" N., Long. 114°03'00" W.; northeast to Lat. 36°14'00" N., Long. 1130°09'50" W.; thence northeast along the boundary of the Grand Canyon National Park to 36°22'55" N., Long. 112°52'00" W.; to Lat. 36°30'30" N., Long. 112°36'15" W. to Lat. 36°21'30" N., Long. 112°00'00" W. to Lat. 36°35'30" N., Long. 111°53'10" W. to Lat. 36°53'00" N., Long. 111°36'45" W. to Lat. 36°53'00" N., Long. 111°33'00" W.; to Lat. 36°19'00" N., Long. 111°50'50" W.; to Lat. 36°17'00" N., Long. 111°42'00" W.; to Lat. 35°59'30" N., Long. 111°42'00" W.; to Lat. 35°57'30" N., Long. 112°03'55" W.; thence counterclockwise via the 5 statute mile radius of the Grand Canyon Airport airport reference point (Lat. 35°57'09" N., Long. 112°08'47" W.) to Lat. 35°57'30" N., Long. 112°14'00" W.; to Lat. 35°57'30" N., Long. 113°11'00" W.; to Lat. 35°42'30" N., Long. 113°11'00" W.; to 35°38'30" N.; Long. 113°27'30" W.; thence counterclockwise via the 5 statute mile radius of the Peach Springs VORTAC to Lat. 35°41'20" N., Long. 113°36'00" W.; to Lat. 35°55'25" N., Long. 113°49'10" W.; to Lat. 35°57'45" N., 113°45'20" W.; thence northwest along the park boundary to Lat. 36°02'20" N., Long. 113°50'15" W.; to 36°00'10" N., Long. 113°53'45" W.; thence to the point of beginning.

**Section 2. Definitions. [Removed]**

**Section 3. Aircraft Operations: General. [Removed]**

**Section 4. Flight-Free Zones.** Except in an emergency or if otherwise necessary for safety of flight, or unless otherwise authorized by the Flight Standards District Office for a purpose listed in Section 3(5), no person may operate an aircraft in the Special Flight Rules Area within the following areas:

(a) *Desert View Flight-Free Zone.* Within an area bounded by a line beginning at Lat. 35°59'30" N., Long. 111°46'20" W.; to 35°59'30" N., Long. 111°52'45" W.; to Lat. 36°04'50" N., Long. 111°52'00" W.; to Lat. 36°06'00" N., Long. 111°46'20" W.; to the point of origin; but not including the airspace at and above 10,500 feet MSL within 1 mile of the western boundary of the zone. The area between the Desert View and Bright Angel Flight-Free Zones is designated the "Zuni Point Corridor."

(b) *Bright Angel Flight-Free Zone.* Within an area bounded by a line beginning at Lat. 35°59'30" N., Long. 111°55'30" W.; to Lat. 35°59'30" N., Long. 112°04'00" W.; thence counterclockwise via the 5-statute mile radius of the Grand Canyon Airport point (Lat. 35°57'09" N., Long. 112°08'47" W.) to Lat. 36°01'30" N., Long. 112°11'00" W.; to Lat. 36°06'15" N., Long. 112°12'50" W.; to Lat. 36°14'40" N., Long. 112°08'50" W.; to Lat. 36°14'40" N., Long. 111°57'30" W.; to Lat. 36°12'30" N., Long. 111°53'50" W.; to the point of origin; but not including the airspace at and above 10,500 feet MSL within 1 mile of the eastern boundary between the southern boundary and Lat. 36°04'50" N. or the airspace at and above 10,500 feet MSL within 2 miles of the northwest boundary. The area bounded by the Bright Angel and Shinumo Flight-Free Zones is designated the "Dragon Corridor."

(c) *Shinumo Flight-Free Zone.* Within an area bounded by a line beginning at Lat. 36°04'00" N., Long. 112°16'40" W.; northwest along the park boundary to a point at Lat. 36°11'45" N., Long. 112°32'15" W.; to Lat. 36°21'15" N., Long. 112°20'20" W.; east along the park boundary to Lat. 36°21'15" N., Long. 112°13'55" W.; to Lat. 36°14'40" N., Long. 112°11'25" W.; to the point of origin. The area between the Thunder River/Toroweap and Shinumo Flight Free Zones is designated the "Fossil Canyon Corridor."

(d) *Toroweap/Thunder River Flight-Free Zone.* Within an area bounded by line beginning at Lat. 36°22'45" N., Long. 112°20'35" W.; thence northeast along the boundary of the Grand Canyon National Park to Lat. 36°15'00" N., Long. 113°03'15" W.; to Lat. 36°15'00" N., Long.

for safety of flight, or unless otherwise authorized by the Flight Standards District Office for a purpose listed in Section 3(b), no person may operate an aircraft in the Special Flight Rules Area at an altitude lower than the following:

- (a) Eastern section from Lees Ferry to North Canyon: 5,000 feet MSL.
- (5) Eastern section from North Canyon to Boundary Ridge: 6,000 feet MSL.
- (c) Boundary Ridge to Supai (Yumtheska) Point: 7,500 feet MSL.
- (d) Supai Point to Diamond Creek: 6,500 feet MSL.
- (e) Western section from Diamond Creek to the Grand Wash Cliffs: 5,000 feet MSL.

**Section 6. *Commercial Sightseeing Flights.* [Removed]**

**Section 7. *Minimum Terrain Clearance.* [Removed]**

**Section 8. *Communications.* [Removed]**

**Section 9. *Termination Date.* [Section 1. *Applicability*, Section 4. *Flight-Free Zones*, and Section 5. *Minimum Flight Altitudes*, expire on 0901 UTC, January 31, 1998.]**

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**SFAR 50-2:**  
**SPECIAL FLIGHT RULES IN THE VICINITY OF**  
**GRAND CANYON NATIONAL PARK**

**LEGEND**

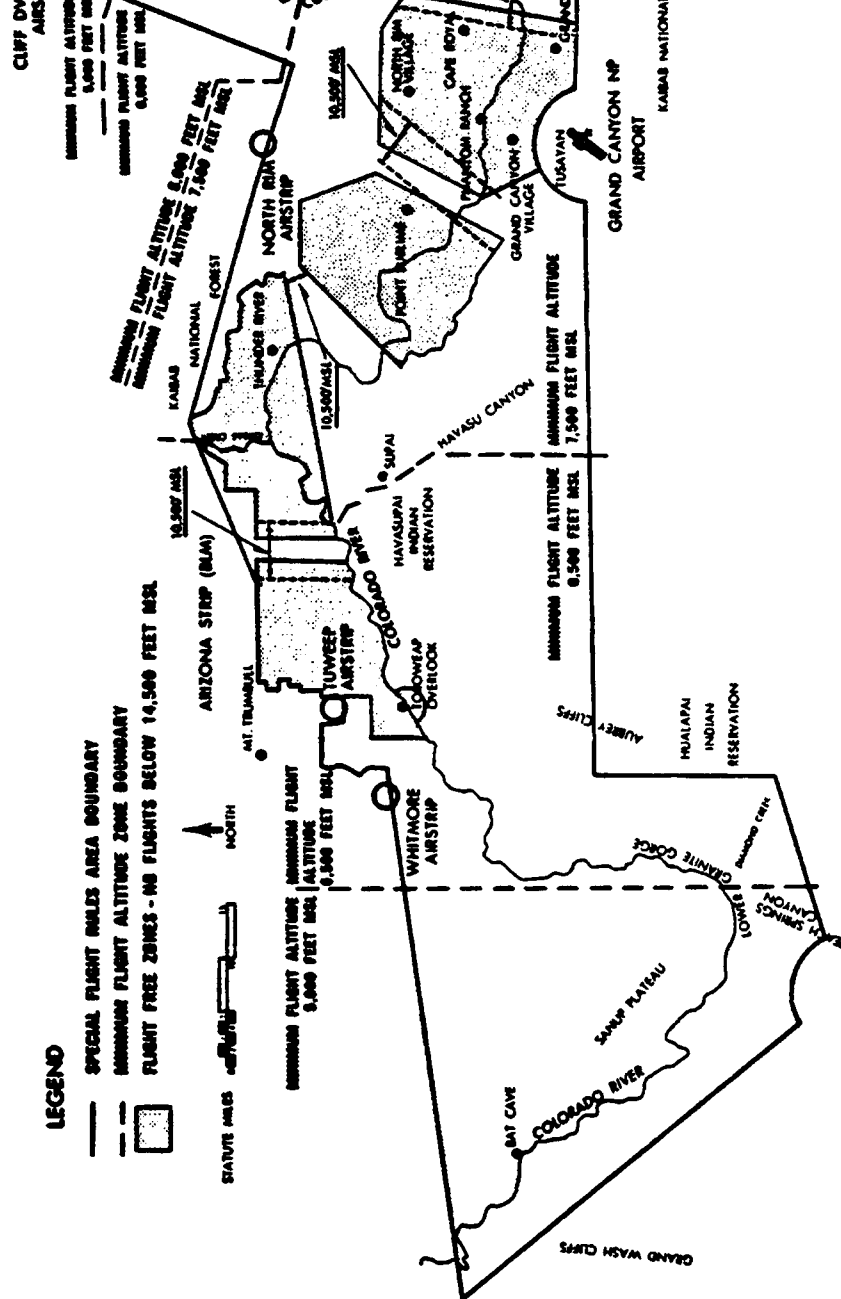
— SPECIAL FLIGHT RULES AREA BOUNDARY

- - - MINIMUM FLIGHT ALTITUDE ZONE BOUNDARY

□ FLIGHT FREE ZONES - NO FLIGHTS BELOW 14,500 FEET MSL

STATUTE MILES

NORTH







***Class B airspace area designated as the Los Angeles Special Flight Rules Area:】***

That part of Area A of the Los Angeles TCA between 3,500 feet above mean sea level (MSL) and 4,500 feet MSL, inclusive, bounded on the north by Ballona Creek, on the east by the San Diego Freeway; on the south by Imperial Highway and on the west by the Pacific Ocean shoreline.

**Section. 2. Aircraft operations, general.** Unless otherwise authorized by the Administrator, no person may operate an aircraft in the airspace described in Section 1 unless the operation is conducted under the following rules:

(a) The flight shall be conducted under VFR and only when operation may be conducted in compliance with § 91.105(a).

***(a) 【The flight must be conducted under VFR and only when operation may be conducted in compliance with § 91.155(a)】.***

(b) The aircraft shall meet the equipment requirements specified in § 91.24(b) replying on Code 1201 prior to entering and while operating in this area.

***(b) 【The aircraft must be equipped as specified in § 91.215(b) replying on Code 1201 prior to entering and while operating in this area.】***

(c) The pilot shall have a current Los Angeles Terminal Area Chart in the aircraft.

(d) The pilot shall operate on the Santa Monica very high frequency omni-directional radio range (VOR) 132 degree radial.

(e) Operations in a southeasterly direction shall be in level flight at 3,500 feet MSL.

(f) Operations in a northwesterly direction shall be in level flight at 4,500 feet MSL.

(g) Indicated airspeed shall not exceed 140 knots.

(h) Anticollision lights and aircraft position/navigation lights shall be on. Use of landing lights is recommended.

(i) Turbojet aircraft are prohibited from VFR operations in this area.

**Section. 3.** Notwithstanding the provisions of § 91.80(a), an air traffic control authorization is not required in the Los Angeles Special Flight Rules Area for operations in compliance with Section 2 of this SFAR. All other provisions of § 91.90 apply to operate in the Special Flight Rules Area.

***Section. 3. 【Notwithstanding the provisions of § 91.131(a), an air traffic control authorization is not required in the Los Angeles Special Flight Rules Area for operations in compliance with Section 2 of this SFAR. All other provisions of § 91.131 apply to operate in the Special Flight Rules Area.】***

*Authority:* 49 U.S.C. app. 1303, 1348, 1354(a), 1421, and 1422; 49 U.S.C. 106(g).



**SUMMARY:** The Administrator of the FAA has determined that, if the sequestration provisions of the Gramm-Rudman-Hollings Act take effect on October 1, 1990, an emergency will exist requiring that immediate measures be taken in order to maintain air safety. All FAA employees, including air traffic controllers, may expect to be furloughed for a specified number of days within each pay period of work. If the furlough is implemented, such action will result in a reduction in the number of air traffic controllers available on the job and will significantly affect the FAA's ability to operate the Air Traffic Control (ATC) system and provide full ATC services. This Special Federal Aviation Regulation authorizes special provisions for the operation of the ATC system during the period that the emergency conditions exist in order to provide for the safe and orderly movement of air traffic.

**EFFECTIVE DATE:** September 28, 1990. The FAA will accept comments on the rule as long as it remains in force.

**FOR FURTHER INFORMATION CONTACT:** Mr. John M. Broderick, Program Manager, Civil Operations, ATM-100, Office of Air Traffic System Management, Federal Aviation Administration, 800 Independence Avenue SW., Washington DC 20591, telephone (202) 267-8343. Send comments on the rule in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204) Docket No. 26351, 800 Independence Avenue, SW., Washington, DC 20591. Comments may be examined in the Rules Docket, weekdays, except Federal holidays, between 8:30 am. and 5:00 pm. Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center, APA-200, 800 Independence Avenue, SW., or by calling (202) 267-3484. Communications must identify the amendment number of the document.

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

Although this action is in the form of an emergency final rule which involves immediate flight safety throughout the United States, and, thus was not preceded by notice and public procedure, comments are invited. Comments on the rule should be submitted to the address indicated above. Comments are specifically invited on any aspect of this emergency action which identifies a need to modify the regulation should the occasion arise in the future to operate the ATC system under emergency conditions. Commenters wishing the FAA to acknowledge receipt of their comments in response to this rule must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 26351." The postcard will be date/time stamped and returned to the commenter.

## **AIR TRAFFIC CONTROL SYSTEM EMERGENCY OPERATIONS**

### **Background**

If necessary, the FAA will begin a furlough of its employees beginning October 1, 1990. A furlough is being considered because the agency's operating funds may be significantly reduced pursuant to the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), commonly known as the Gramm-Rudman-Hollings Act, as amended. For every nonexempted budget account in the Federal Government, the Gramm-Rudman-Hollings Act requires that agency expenditures be cut on a uniform basis. This reduction is referred to

priorities for national security. For example, during good weather conditions, there is less demand on the ATC system by general aviation users. As a second example, the military may be given priority for ATC services due to the current Persian Gulf crisis.

However, the FAA is assessing current policies and developing new strategies to maximize service to the greatest number of users during a period of reduced resources. For example, ATC facility staff personnel, including staff regularly assigned responsibility for training, planning and procedures, military coordination, and special programs, will be used to augment the controller workforce.

Additionally, by utilizing traffic management procedures consistent with the pro rata reduction of services to users, an orderly movement of traffic will be better maintained. Such procedures will proportionally affect all civil users. Traffic management procedures use the published, advertised air carrier schedules to the maximum extent possible and allow the air carrier operators maximum control over their individual operations. These procedures also permit normal flight planning and the use of fuel conservation techniques by the users. Traffic management procedures can be applied to a single airport or to the system as a whole and are fully coordinated in advance, and updated as conditions at each airport change. Under normal conditions, the FAA's Air Traffic Control System Command Center has the ability to maintain an efficient flow of air traffic. With reduced ATC resources, it will be necessary to activate a more restrictive plan to reduce the number of scheduled instrument flight rules (IFR) operations and to require reservations for general aviation IFR flight activity. The two parts of this plan are designated as the National Air Traffic Reduced Complement Operations Plan and the General Aviation Reservation Program.

Under the rule adopted, the Director of the Office of Air Traffic System Management (Director) is authorized, as conditions warrant, to restrict, prohibit or permit visual flight rules (VFR) and/or IFR operations at any airport, terminal control area (TCA) or other terminal and en route airspace; to give priority at any airport to flights that are of military necessity, medical emergency flights, Presidential flights, and flights transporting critical Government employees; and to implement at any airport traffic management procedures including pro rata reduction of air carrier, commercial operator and general aviation operations.

## THE NATIONAL AIR TRAFFIC REDUCED COMPLEMENT OPERATIONS PLAN

### General

When necessary, the National Air Traffic Reduced Complement Operations Plan (RCOP) will be implemented by issuance of an order of the Director. The RCOP assumes that an average of 75 percent of qualified controllers will be available for work. Flights necessary for National defense purposes and emergency flights will receive priority and will be accommodated ahead of all other flights. IFR clearances will be issued only in accordance with the provisions of the RCOP. VFR in terminal control areas (TCAs) may be restricted to arrivals and departures only; i.e., VFR flight in TCAs for purposes of transiting may not be authorized. However, restrictions will be relaxed or eliminated when sufficient ATC staffing is available to provide the requested services. Orders and information necessary to maintain the integrity of the ATC system will be disseminated, in accordance with § 91.139 of the FAR, by NOTAMs.

of the ATC facilities serving key airports developed an hourly airport acceptance rate (AAR) and an hourly airport departure rate (ADR), for the reduced staffing that may be required by the furlough action. These AAR and departure rates equate to the airports' reduced hourly capacities. The figures developed are based on best-case VFR conditions. Situations involving adverse weather conditions or other capacity limiting phenomena will be controlled by the Air Traffic Control System Command Center (ATCSCC) through normal traffic management initiatives.

The facilities were given the following specific assumptions to use in the development of hourly arrival and departure rates.

- Furloughs would begin October 1.
- Each person receives 2.5 days furlough per pay period
  - Equates to 25 percent reduction in staffing
- No overtime
- No annual leave or administrative leave in lieu of furlough
- No compensatory time
- No work beyond normal hours permitted/suffered
- Normal sick leave
- No on-the-job training
- Use of staff to supplement operation
- Reduced operational capabilities of stand alone TRACONs such as New York and Oakland Bay will influence airport AAR and ADR.

A comparison was made between the arrival and departure rates established by the air traffic facilities established at the key airports and the Official Airline Guide (OAG). The comparison was made to determine the percentage of traffic reduction required to meet the capacity level.

To implement this RCOP, each user operating at key airports will be required to reduce its scheduled arrivals and/or departures at each key airport by a percentage of its total flights in each hour. By multiplying the percentage reduction by the number of scheduled arrivals or departures at that airport during that hour, the user determines the number of flights to be cancelled to meet the requirements of the RCOP. Cancellations are to be sent to the ATCSCC Automation Staff so that the ATC data base can be updated. This method of reducing the number of flights impacts scheduled operators in proportion to the size of their operations at each airport, through a proportional reduction of each scheduled operator's normal schedule of flights. The FAA believes that this is the most equitable means of reducing demand on the ATC system.

Operational priority will be provided to flights identified by the Department of Defense (DOD) as necessary for Desert Shield and support activities. Other DOD activities will be handled on a case-by-case basis in accordance with reasonable priority identified by DOD. Flight service stations and the National Flight Data Center will handle safety-related traffic and duties and perform other services if workload and resources permit. Service within TCAs and airport radar service areas may be terminated during the period of reduced staffing. General

this plan are required in support of the plan necessary by NOTAM.

2. The number of hourly arrivals and departures used as the basis for reductions at the key airports is determined by averaging the general aviation historical data and the OAG data for October 1, 1990, for that airport.

3. No operator may change the designated airport of intended operation for any flight contained in the October 1, 1990, OAG.

4. Unscheduled flights such as charters, training, extra sections, ferry flights, etc., to airports designated by the RCOP will be approved on an individual basis by the ATCSCC if system capacity permits.

5. Users will determine their level of operations by taking the reduction percentage, multiplied by the number of normally scheduled arrivals or departures and subtracting the result from the number normally operated. The remainder should be rounded to the nearest whole number. Point 5 should always be rounded up. When only one scheduled arrival or departure is planned for a single hour, that operation does not need to be cancelled.

The Director may make adjustments to the plan, as necessary, 2-4 weeks after implementation. The capacities of the key airports could be adjusted up or down as necessary.

### **Need for Immediate Action**

This action is similar to the action taken in 1981 that responded to a predicted strike by air traffic controllers. However, unlike the current budget situation, the FAA had sufficient time to respond to that strike and, therefore, was able to develop and publish for public comment a draft National Air Traffic Control Contingency Plan (NATCC) (45 FR 75096; November 13, 1980). Numerous comments were received. The NATCC was revised and updated based on those comments. The contingency plan was subsequently adopted (46 FR 15402; March 5, 1981).

It is now necessary to implement similar actions and procedures for the National Air Traffic Reduced Complement Operations Plan. While there is not sufficient time to precede this emergency rule with notice and a public comment period, aviation industry representatives, commercial operators, and news media were invited to a meeting at FAA Headquarters in Washington, DC, on September 19, 1990, to be briefed on the plan and to provide comments to the FAA staff. A follow-up meeting of affected carriers was held on September 24, 1990, in response to a request by the Air Transport Association. The commercial entities and segments of the aviation industry impacted by this action, and the actions taken by the FAA in 1981 and being taken now are, for the most part, very similar. In adopting this plan, the FAA has considered both the comments received on the 1981 proposed plan and experience with implementation of that plan, as well as comments received at the meetings of September 19 and 24. The rule and plan adopted incorporate some of those comments. The FAA has determined that an emergency exists which is caused by the imminent action of the proposed furlough. Further, the situation dictates the immediate adoption of this regulation in the interest of safety in air commerce. Therefore, I find that further notice and public procedure are impracticable and contrary to the public interest; I further find for the same reasons that good cause exists for making this regulation effective in less than 30 days after its publication in the Federal Register.

Accordingly, the Federal Aviation Administration is amending Part 91 and Part 93 of the Federal Aviation Regulations, 14 CFR Parts 91 and 93, by the adoption of Special Federal Aviation Regulation No. 60, effective September 28, 1990.

The authority citation for Part 91 continues to read as follows:

*Authority:* 49 U.S.C. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 31(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 et seq; E.O. 11514; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983).

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in the October 1, 1990, OAG.

2. Notwithstanding any provision of the Federal Aviation Regulations to the contrary, no person may operate an aircraft in the Air Traffic Control System:
  - a. Contrary to any restriction, prohibition, procedure or other action taken by the Director of the Office of Air Traffic Systems Management (Director) pursuant to Paragraph 3 of this regulation and announced in a Notice to Airmen pursuant to § 91.139 of the Federal Aviation Regulations.
  - b. When the National Air Traffic Reduced Complement Operations Plan is activated pursuant to Paragraph 4 of this regulation, except in accordance with the pertinent provisions of the National Air Traffic Reduced Complement Operations Plan.
3. Prior to or in connection with the implementation of the RCOP, and as conditions warrant, the Director is authorized to:
  - a. Restrict, prohibit, or permit VFR and/or IFR operations at any airport, terminal control area, airport radar service area, or other terminal and en route airspace.  
**[a. Restrict, prohibit, or permit VFR and/or IFR operations at any airport, Class B airspace area, Class C airspace area, or other class of controlled airspace.]**
  - b. Give priority at any airport to flights that are of military necessity, or are medical emergency flights, Presidential flights, and flights transporting critical Government employees.
  - c. Implement, at any airport, traffic management procedures, that may include reduction of flight operations. Reduction of flight operations will be accomplished, to the extent practical, on a pro rata basis among and between air carrier, commercial operator, and general aviation operations. Flights cancelled under this SFAR at a high density traffic airport will be considered to have been operated for purposes of Part 93 of the Federal Aviation Regulations.
4. The Director may activate the National Air Traffic Reduced Complement Operations Plan at any time he finds that it is necessary for the safety and efficiency of the National Airspace System. Upon activation of the RCOP and notwithstanding any provision of the FAR to the contrary, the Director is authorized to suspend or modify any airspace designation.
5. Notice of restrictions, prohibitions, procedures and other actions taken by the Director under this regulation with respect to the operation of the Air Traffic Control system will be announced in Notices to Airmen issued pursuant to § 91.139 of the Federal Aviation Regulations.
6. The Director may delegate his authority under this regulation to the extent he considers necessary for the safe and efficient operation of the National Air Traffic Control System.

CLT	Charlotte-Douglas International
CVG	Greater Cincinnati International
DAL	Dallas-Love
DAY	Cox-Dayton International
DCA	Washington National
DEN	Stapleton International
DFW	Dallas-Fort Worth International
DTW	Detroit Metropolitan Wayne County
EWK	Newark International
FLL	Ft. Lauderdale-Hollywood International
HOU	William B. Hobby
IAD	Washington-Dulles International
IAH	Houston Intercontinental
IND	Indianapolis International
JFK	John F. Kennedy International
LAX	Los Angeles International
LGA	La Guardia
MCO	Orlando International
MDW	Chicago Midway
MEM	Memphis International
MIA	Miami International
ORD	Chicago-O'Hare International
PPI	Palm Beach International
PHL	Philadelphia International
PHX	Phoenix Sky Harbor International
PIT	Greater Pittsburgh International
RDU	Raleigh-Durham International
SAN	San Diego-Lindbergh International
SEA	Seattle-Tacoma International
SFO	San Francisco International
SJC	San Jose International
SLC	Salt Lake City International
STL	Lambert-St. Louis International

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61, which was made effective on November 9, 1990, and expired on November 9, 1991. This action prohibits the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight to or from the territory of Iraq. This action further prohibits the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flight's origin or ultimate destination is Iraq. Exceptions are made for particular flights approved by the United States Government in consultation with the UN Security Council committee established under Security Council Resolutions 661, 666 and 670 (1990) and for certain emergency operations. This action is necessary to implement Executive Orders 12722 (1990) and 12724 (1990) and Security Council Resolutions 661, 666, and 670 mandating an embargo of air traffic with Iraq.

**DATES:** SFAR 61-2 is effective on September 21, 1995. SFAR 61-2 shall remain in effect until further notice.

**FOR FURTHER INFORMATION CONTACT:** Jeffrey A. Klang, International Affairs and Legal Policy Staff (AGC-7), Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3515.

## **SUPPLEMENTARY INFORMATION:**

### **Availability of Document**

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Public Inquiry Center (APA-230), 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the number of this SFAR. Persons interested in being placed on a mailing list for future rules should also request a copy of the Advisory Circular No. 11-2A, which describes the application procedure.

### **Background**

The Federal Aviation Administration (FAA) is responsible for the safety of flight in the United States and the safety of U.S.-registered aircraft and U.S. operators throughout the world. Section 40101(d)(1) of Title 49, United States Code, requires the Administrator of the FAA to consider the regulation of air commerce in a manner that best promotes safety and fulfills the requirements of national security as being in the public interest. In addition, 49 U.S.C. 40105(b)(1)(A) requires the Administrator to exercise his authority consistently with the obligations of the United States Government under an international agreement.

One such international agreement is the Charter of the United Nations (the Charter) (59 Stat. 1031; 3 Bevans 1153 (1945)). Under Article 25 of the Charter, "the members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter." Article 48(1) of the Charter further provides, in pertinent part, that "[t]he action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all members of the United Nations . . . ."

On September 25, 1990, acting under Chapter VII of the Charter, the Security Council adopted Resolution 670, mandating an embargo of certain air traffic with Iraq. Paragraph 3 of Resolution 670 requires all states to deny permission to any aircraft to take off from their territory if the aircraft would carry any cargo to or from Iraq other than food provided under

(b) The particular flight has been approved by the sanctions committee established by Resolution 661; or

(c) The flight is certified by the UN as solely for the purposes of UNIIMOG.

The United States Government has taken several actions to restrict air transportation between the United States and Iraq. On August 2, 1990, the President issued Executive Order 12722 (55 FR 31803, August 3, 1990), which prohibits "any transaction by a United States person relating to transportation to or from Iraq; the provision of transportation to or from the United States by any Iraqi person or any vessel of Iraqi registration; or the sale in the United States . . . of any transportation by air which includes any stop in Iraq;" and defines "United States person" so as to include any person within the United States.

On August 6, 1990, the Secretary of Transportation implemented Executive Order 12722 by issuing Order 90-8-16, which amended all Department of Transportation (DOT) certificates issued under section 401 of the Federal Aviation Act, all permits issued under section 402 of the Act, and all exemptions from sections 401 and 402 to prohibit the holder from selling or engaging in transportation by air to Iraq, or engaging in any transportation to or from Iraq.

On August 8, 1990, the President, exercising his authority under the United Nations Participation Act of 1945, as amended, issued Executive Order No. 12724 (55 FR 33089, August 13, 1990), pertaining to Iraq. This order contains additional prohibitions on air transportation to Iraq.

In support of Executive Orders 12722 and 12724, the FAA adopted SFAR 61 on November 9, 1990. SFAR 61 prohibited the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight to or from the territory of Iraq. SFAR 61 also prohibited the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flight is destined to land in or take off from Iraq. SFAR 61 expired on November 9, 1991.

Copies of UN Security Council Resolutions 660, 661 and 670, Executive Orders 12722 and 12724, and DOT Order 90-8-16, all of which remain in effect, have been placed in the docket for this rulemaking.

#### **Prohibition Against Certain Flights Between the United States and Iraq**

On the basis of the above, and in support of the Executive Order of the President of the United States, I find that immediate action by the FAA is required to implement Executive Orders 12722 and 12724 and to meet the obligations of the United States under international law as evidenced by U.N. Security Council Resolutions No. 660, 661 and 670. Accordingly, I am ordering a prohibition on the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight that has Iraq as its origin or ultimate destination. Operations approved by the United States Government in consultation with the UN Security Council committee established under Resolution 661 and certain emergency operations shall be excepted from this prohibition. For the reasons stated above, I also find that notice and public comment under 5 U.S.C. 533(b) are impracticable and contrary to the public interest. Further, I find that good cause exists for making this rule effective immediately upon publication. I also find that this action is fully consistent with my obligations under section 49 U.S.C. 40105(b)(1)(A) to act consistently with the obligations of the United States under international agreements.

## **Paperwork Reduction Act**

The rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

### **International Trade Impact Assessment**

DOT Order 90-8-16 prohibits U.S. and foreign air carriers from engaging in the sale of air transportation to or from Iraq. This SFAR does not impose any restrictions on commercial carriers beyond those imposed by the DOT Order. Therefore, the SFAR will not create a competitive advantage or disadvantage for foreign companies in the sale of aviation products or services in the United States, nor for domestic firms in the sale of aviation products or services in foreign countries.

### **Federalism Determination**

The amendment set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612 (52 FR 4168; October 30, 1987), it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons set forth above, the FAA has determined that this action is not a "significant regulatory action" under Executive Order 12866. This action is not considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Because revenue flights to Iraq are already prohibited by DOT Order 90-8-16, the FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **The Amendment**

For the reasons set forth above, the Federal Aviation Administration is amending 14 CFR part 91 effective September 21, 1995.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. app 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et seq.*; E.O. 11514, 35 FR 4247, 3 CFR, 1966-1970 Comp., p. 902; 49 U.S.C. 106(g).

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(a) No person shall operate an aircraft on a flight to any point in Iraq, or to any intermediate point on a flight where the ultimate destination is any point in Iraq or that includes a landing at any point in Iraq in its intended itinerary, from any point in the United States;

(b) No person shall operate an aircraft on a flight to any point in the United States from any point in Iraq, or from any intermediate point on a flight where the origin is in Iraq, or from any point on a flight which includes a departure from any point in Iraq in its intended itinerary; or

(c) No person shall operate an aircraft over the territory of the United States if that aircraft's flight itinerary includes any landing at or departure from any point in Iraq.

【3. *Permitted operations.* This SFAR shall not prohibit the flight operations between the United States and Iraq described in section 2 of this SFAR by an aircraft authorized to conduct such operations by the United States Government in consultation with the committee established by UN Security Council Resolution 661 (1990), and in accordance with UN Security Council Resolution 666 (1990).

【4. *Emergency situations.* In an emergency that requires immediate decision and action for the safety of the flight, the pilot in command of an aircraft may deviate from this SFAR to the extent required by that emergency. Except for U.S. air carriers and commercial operators that are subject to the requirements of 14 CFR 121.557, 121.559, or 135.19, each person who deviates from this rule shall, within ten (10) days of the deviation, excluding Saturdays, Sundays, and Federal holidays, submit to the nearest FAA Flight Standards District Office a complete report of the operations or the aircraft involved in the deviation, including a description of the deviation and the reasons therefore.

【5. *Duration.* This SFAR No. 61-2 shall remain in effect until further notice.】

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**SUMMARY:** This Special Federal Aviation Regulation (SFAR) suspends, until December 30, 1993, certain provisions of the regulation which require the installation and use of automatic altitude reporting (Mode C) transponders (Mode C rule). This suspension provides access to specified outlying airports within 30 miles of a terminal control area (TCA) primary airport (Mode C veil) for aircraft without Mode C transponders. The FAA believes that the operation of an aircraft without a Mode C transponder can be safely accommodated provided that the operation is conducted in areas not currently within air traffic control (ATC) radar coverage and not predominantly used by aircraft required to install and use traffic alert and collision avoidance systems (TCAS) equipment. This rule identifies approximately 300 airports at which operations by aircraft not equipped with Mode C transponders can be conducted at and below a specified altitude: (1) within a 2-nautical mile radius of a listed airport; and (2) along a direct route between that airport and the outer boundary of the Mode C veil. The FAA expects that radar coverage in some Mode C veil airspace will improve as a result of scheduled radar system upgrades. After new radar systems are in service, the FAA may conduct field evaluations to reassess the actual radar coverage in appropriate areas. Based on those reassessments, the FAA, after further rulemaking, may extend the period that the Mode C transponder requirement will be suspended for operations at certain airports on a case-by-case basis.

**DATES:** December 5, 1990, except as noted below with regard to the Washington Tri-Area TCA. SFAR No. 62 expires December 30, 1993.

**FOR FURTHER INFORMATION CONTACT:** Mr. Richard K. Kagehiro, Air Traffic Rules Branch, ATP-230, Federal Aviation Administration, 800 Independence Avenue, S.W., Washington, D.C. 20591, telephone (202) 267-8783.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

On June 21, 1988, the FAA published a final rule which requires aircraft operating within Mode C veil airspace to be equipped with an operable Mode C transponder (53 FR 23356). Aircraft not originally certificated with an engine-driven electrical system or not subsequently certified with such a system installed, balloons, and gliders are excluded from this requirement. The Mode C transponder requirement resulted from regulatory proceedings initiated under Notice 88-2(53 FR 4306; February 12, 1988).

On May 25, 1990, the FAA published a Notice of Proposed Rulemaking (NPRM) which proposed to suspend, until December 30, 1993, the Mode C transponder equipment requirements for certain aircraft operations in the vicinity of approximately 300 airports in the outlying areas of Mode C veils (55 FR 21722; Notice No. 90-16). The FAA had determined that operations of aircraft without Mode C transponders could be accommodated safely provided such operations are conducted in areas not currently within ATC radar coverage. The proposal identified those airports: (1) at which operations within a 1.5-nautical mile radius of the airport, and along the most direct route between that airport and the outer boundary of the Mode C veil, at or below a specified altitude, cannot be detected by ATC radar; and (2) are not served by aircraft required to be equipped with TCAS.

support of the proposal but provided suggestions and comments. The Department of the Army, although generally in support of the concept of providing access for aircraft without Mode C transponder equipment to certain airports within the Mode C veil, opposed the proposal on the basis that Army airports and locations should be included in the list of airports. Seven of the comments to Docket No. 26242 did not address any issue related to the proposal.

### **Issues**

The commenters identified the following issues in response to the proposal:

(a) The relief proposed is not adequate. The commenters favored a general exclusion of aircraft operations from the Mode C transponder equipment requirement in the airspace from the surface up to 2,500 or 3,500 feet above ground level (AGL) underneath Mode C veil airspace.

(b) The specified altitudes should be uniform. These commenters believed that a common altitude should be specified for all of the listed airports.

(c) Other airports within the TCA veil should be listed. A few commenters stated that certain additional airports should be included in the list of airports.

(d) A list of airports for certain TCA's were omitted from the proposal.

(e) Operations between two excluded airports within the same TCA Mode C veil should be permitted.

(f) The specified altitudes and the 1.5-nautical mile radius from excluded airport is too restrictive. Some commenters believed that limiting the exclusion to a 1.5-nautical mile radius from a listed airport would be too restrictive for a pilot and that determining a distance of 1.5 miles from an airport would be difficult. Other commenters were concerned that the specified altitudes, such as 1,000 feet AGL, would not afford pilots sufficient margin for maneuvering.

(g) The proximity of Hernando County Airport (Tampa veil) to a military training route may compromise safety. The Air Force commented that the exclusion of the Mode C transponder equipment requirement for operations in the vicinity of Hernando County Airport, Brooksville, FL, would impact the quality of traffic advisory service its pilots routinely receive from Tampa Approach Control.

### **Discussion of Issues**

(a) The relief proposed is not adequate. Most of the commenters believed that the FAA should provide access for aircraft without Mode C transponders to all airports or locations within Mode C veil airspace, and that the FAA should therefore exclude the airspace from the surface up to 2,500 or 3,500 feet AGL from the Mode C transponder requirement. The FAA has maintained that safety is enhanced by the Mode C rule because the operation of Mode C transponders results in the display of an enhanced radar target on air traffic controllers' radar scopes; facilitates the radar identification of aircraft; facilitates computer-assisted tracking of aircraft; and provides altitude information for each aircraft. Further, the availability of associated altitude information for all radar targets and computer-assisted radar identification and tracking reduces controller workload. Radio communications are also reduced by the use of Mode C transponders since the display of altitude information eliminates unnecessary traffic advisories. Because of the numerous benefits and the increase in safety derived from the use of transponders with automatic altitude reporting equipment, the FAA believes that aircraft

operations are limited to areas and are conducted below altitudes that are not within current ATC radar coverage. The FAA further stated that the safety benefits attributed to the use of TCAS equipment should not be derogated. Consequently, the FAA concluded that the applicability of the suspension of the Mode C transponder requirement must be further limited to aircraft operations in the vicinity of airports that are not served by scheduled air carrier operations using aircraft that will be required to install TCAS.

By limiting the applicability of the Mode C transponder suspension to those areas outside ATC radar coverage, the possibility of unenhanced radar targets without associated altitude information being displayed on the radar scopes of air traffic controllers is minimized. A general exclusion of the Mode C transponder requirement for operations within a Mode C veil at and below 2,500 or 3,500 feet AGL would be inconsistent with the FAA's desire to limit operations of aircraft without Mode C transponder equipment to areas outside current ATC radar coverage and would derogate the level of safety to be provided to operations to, from, and in the vicinity of the TCA primary airport.

(b) The specified altitudes should be uniform. ATC radar coverage is dependent on a number of variables including terrain, electromagnetic interference, and other obstructions to radar signals. Consequently, radar coverage does not extend down to a uniform altitude throughout Mode C veil airspace. Similar to the discussion regarding a shelf or a general exclusion of the airspace underneath the Mode C veil, a uniform altitude would not be consistent with the requirement that excluded operations be conducted in areas not within ATC radar coverage.

(c) Other airports within the TCA veil should be listed. In response to comments that operations in the vicinity of other airports should be excluded from the Mode C transponder requirement, the extent of ATC radar coverage in the areas that were the subject of the comments was reexamined. As a result, five additional airports will be added to the list of airports at which operations by aircraft without Mode C transponder equipment will be permitted. Those airports are Ziermann Airport, Mayer, MN; Aero Country Airport, McKinney, T; Kentmorr Airpark Airport, Stevensville, MD; Bay Bridge Airport, Stevensville, MD; and Castle Marina Airport, Chester, MD.

With regard to the Army's comments about the absence of Army airports on the proposed list of airports, the FAA notes that the proposal did list the following airports: Moore Army Air Field (AAF), Ayer/Fort Devens, MA; Phillips AAF, Aberdeen, MD; and Weide AAF, Edgewood Arsenal, MD.

(d) A list of airports for certain TCA's were omitted from the proposal. The FAA determined that current radar coverage within the Los Angeles, Miami, Pittsburgh, Orlando, San Diego, and San Francisco TCA Mode C veils extends down to an altitude which would preclude the exclusion of operations in the vicinity of airports within these TCA Mode C veil locations from the Mode C transponder equipment requirement. Consequently, airports within the Mode C veils for these TCA's were not listed. However, based on a reevaluation of the radar coverage for the Orlando TCA Mode C veil, the FAA has determined that two airports should be included in the list of airports for that Mode C veil. Those airports are: (1) Arthur Dunn Air Park Airport, Titusville, FL; and (2) Space Center Executive Airport, Titusville, FL. Although there were no specific comments regarding the inclusion of airports for the Orlando TCA Mode C veil received during the comment period, the FAA believes that the exclusion of operations in the vicinity of the two airports from the Mode C transponder equipment requirement can be accommodated safely and is in the public interest.

(f) The specified altitudes and the 1.5-nautical mile radius from a listed airport is too restrictive. While the FAA believes that a 1.5-nautical mile radius from a listed airport provides sufficient maneuvering airspace, the FAA concedes that it may be difficult for a pilot to accurately determine a distance of 1.5 nautical miles from an airport and that a 2-nautical mile distance from the airport would be easier to determine. In the interest of simplification and the marginal increase in safety attributable to a more consistent and accurate determination of a distance of 2 miles as opposed to 1.5 miles, the FAA is revising the area surrounding an airport within which operations will be excluded from the Mode C transponder equipment requirement to a 2-nautical-mile radius from a listed airport. Further, the area surrounding a listed airport within which operations by aircraft without Mode C transponders will be permitted is increased to a 5-nautical-mile radius, when directed or instructed by ATC. A 5-nautical-mile radius around a listed airport coincides with established airspace areas within which ATC routinely exercises control jurisdiction at airports with operating control towers. ATC may need to direct aircraft to operate beyond a 2-nautical-mile radius of a listed airport due to traffic or other operating procedures. The 5-nautical-mile provision is intended to eliminate any uncertainty as to whether an operator of an aircraft without a Mode C transponder, operating to or from an airport listed in this SFAR, should comply with any ATC instruction which would result in an operation beyond a 2-nautical-mile radius of the airport. Similarly, the FAA is adding clarifying language to allow an aircraft operator to proceed on other than the most direct and expeditious routing between a listed airport and the outer boundary of the Mode C veil when so directed by ATC.

With regard to the altitudes for each airport, the FAA believes that the specified altitudes provide sufficient maneuvering room and allow for operation in compliance with the minimum safe altitude provisions of 91.119. However, should the pilot of an aircraft determine that the operation at or below the specified altitude is unsafe due to meteorological conditions, aircraft operating characteristics, or other factors, then the pilot should seek relief from the Mode C transponder requirement via the ATC authorization process.

(g) The proximity of Hernando County Airport (Tampa veil) to a military training route may compromise safety. The Air Force commented that the exclusion of the Mode C transponder equipment requirement for operations in the vicinity of Hernando County Airport would impact the quality of the traffic advisory service its pilots routinely receive from Tampa Approach Control. The FAA does not agree with this comment because only those operations at, to, and from Hernando County Airport that are: (1) within 30 miles of Tampa International Airport; and (2) not within ATC radar coverage, will be excluded from the Mode C transponder equipment requirement. Therefore, the FAA does not believe that the Air Force is routinely receiving traffic advisories with respect to these aircraft since such aircraft would not be detected by ATC radar. Excluding operations in the vicinity of Hernando County Airport from the Mode C transponder requirement should have no impact on the quality of traffic advisory service provided by ATC.

#### **ATC Radar System Improvements**

The FAA expects the radar coverage in some Mode C veil airspace to improve as a result of the scheduled upgrading of radar systems at each TCA location. After new radar systems are in service, the FAA may conduct field evaluations to reassess actual radar coverage on a site-by-site basis. Those reassessments may result in future proposed rulemaking to: (1) extend the period that the Mode C transponder requirement is to be suspended if the evaluations indicate that aircraft operations at a designated airport are still not within radar coverage;

the effective date of the suspension of the Mode C transponder requirements for operations in the vicinity of the listed airports will be coincident with the effective date of the establishment of that TCA. The list of airports within the proposed Washington Tri-Area TCA Mode C veil at which operations will be excluded from the Mode C transponder requirement contains a number of airports which are also included in the list of airports for the current Washington TCA Mode C veil. However, should the Washington Tri-Area TCA be adopted, the current Washington TCA would be revoked and replaced by the Washington Tri-Area TCA. The suspension of the Mode C transponder requirement for aircraft operations at the airports specified for the proposed Washington Tri-Area TCA will coincide with the effective date of the Washington Tri-Area TCA, should that TCA become effective.

With regard to future proposed TCA's, a list of airports and specified altitudes below which aircraft operations would be excluded from the Mode C transponder requirement will accompany any notice of proposed rulemaking for each proposed TCA. The inclusion of the list of airports in the NPRM for the proposed TCA will allow the public to fully consider the impact of the proposed TCA and Mode C veil on aircraft operations; provide the public with the opportunity to comment on the list of airports and specified altitudes; and allow for full consideration of such comments along with other comments to the proposed TCA. If the proposed TCA is adopted, then a final rule amending this SFAR will be published with an effective date coincident with the effective date of the new TCA. The final rule amendment to this SFAR will list those airports within the new TCA Mode C veil at which aircraft operations at and below the specified altitude within a 2-nautical mile radius of an airport and along a direct route between that airport and the outer boundary of the Mode C veil will be suspended from the Mode C transponder equipment requirement. until December 30, 1993.

### **The Special Federal Aviation Regulation**

This SFAR permits the operation of an aircraft to and from designated airports within the Mode C veil without a Mode C transponder. A list of airports at which operations without a Mode C transponder will be permitted is contained in this SFAR. The Mode C transponder requirement will be reinstated for aircraft operations to and from the designated airports after December 30, 1993. However, the FAA may conduct field evaluations to reassess the radar coverage within certain TCA Mode C veils on a site-by-site basis after new radar systems are in service. Based on those reassessments, the FAA may extend the period that the Mode C transponder requirement will be suspended for operations at certain airports on a case-by-case basis through further rulemaking.

Aircraft operations without a Mode C transponder will be permitted within a 2-nautical-mile radius of a designated airport from the surface up to a specified altitude. Additionally, aircraft operations without a Mode C transponder will be permitted along the most direct route between that designated airport and the boundary of the Mode C veil, at and below the specified altitude. The routing must be consistent with established traffic patterns, noise abatement procedures, and safety. This SFAR and the designation of altitudes for each airport, however, are not intended to supersede the provisions of 91.119, Minimum safe altitudes. Routings to and from each airport are intentionally unspecified to permit the pilot, complying with 91.119, to avoid operating over obstructions, noise-sensitive areas, etc. Further, should the pilot of an aircraft intending to operate into or out of an airport listed in this SFAR determine that the operation at or below the specified altitude is unsafe due to meteorological conditions, aircraft operating characteristics, or other factors, the pilot should seek relief from the Mode C transponder requirement via the ATC authorization process.

## **Regulatory Evaluation Summary**

### **Introduction**

This section summarizes the full regulatory evaluation prepared by the FAA which provides more detailed information on estimates of the potential economic consequences of this final rule. This summary and the full evaluation quantify, to the extent practicable, estimated costs to the private sector, consumers, Federal, State and local governments, as well as anticipated benefits. Executive Order 12291, dated February 17, 1981, directs Federal agencies to promulgate new regulations or modify existing regulations only if potential benefits to society for each regulatory change outweigh potential costs. The order also requires the preparation of a Regulatory Impact Analysis of all "major" rules except those responding to emergency situations or other narrowly defined exigencies. A "major" rule is one that is likely to result in an annual effect on the economy of \$100 million or more, a major increase in consumer costs, a significant adverse effect on competition, or highly controversial.

The FAA has determined that this rule will not be "major" as defined in the executive order. Therefore, a full regulatory analysis, that includes the identification and evaluation of cost reducing alternatives to the final rule, has not been prepared. Instead, the agency has prepared a more concise document termed a regulatory evaluation that analyzes only this rule without identifying alternatives.

In addition to a summary of the regulatory evaluation, this section also contains an final regulatory flexibility determination required by the 1980 Regulatory Flexibility Act (P.L. 96-354) and an international trade impact assessment. If the reader desires more detailed economic information than this summary contains, then he/she should consult the full regulatory evaluation contained in the docket.

### **Benefit and Cost Analysis**

#### *Costs*

This final rule is not expected to impose costs on either the FAA or society. In addition, this rule will not impose significant costs on the aviation community (namely, fixed based operators). This assessment is based on rationale contained in the following discussion for each of these groups.

For the FAA, this rule will not impose additional costs for either personnel or equipment. The acquisition of new radar tracking systems is a routine cost of upgrading FAA equipment and will not occur as a result of this rule. In addition, this rule will not require the FAA to hire additional personnel. This is because the temporary suspension of the Mode C transponder requirement is expected to enhance air traffic control (ATC) operation efficiency by eliminating the need for ATC authorizations at the subject designated airports. This action will reduce the demand on ATC personnel and equipment resources.

This rule will not have an adverse impact on aviation safety. The FAA believes that access to certain outlying GA airports by aircraft without Mode C transponders can be accommodated without diminishing Mode C safety benefits, provided the operation is conducted outside

operation at certain airports.

For the aviation community, the FAA anticipates no significant costs will be incurred by fixed base operators (FBOs) as the result of this rule. Fixed base operators represent the most likely group to potentially incur costs. These costs will be in the form of lost revenues from the relocation of GA aircraft without Mode C transponders as a result of this action. However, it is the informed opinion of FAA personnel that any potential cost impact on FBOs will be insignificant. The FAA believes that GA aircraft operators based at non-designated airports within a Mode C veil and currently authorized to operate without a Mode C transponder will have little incentive to relocate since: (1) the ATC authorization contains those conditions and provisions necessary for safe operation and the operator has agreed to comply with those provisions; and (2) the renewal process for an existing authorization is less cumbersome than the first-time authorization process. Furthermore, the FAA does not believe that significant numbers of GA aircraft without Mode C transponders will relocate from outside a Mode C veil to a designated airport within a Mode C veil. This is because this rule will only allow aircraft without Mode C transponders to operate from the surface up to a specified altitude within a 2.0 nautical mile radius of a designated airport and along the most direct route between that airport and the boundary of the Mode C veil. Although this rule will provide greater access to a Mode C veil, the FAA believes that this action will not provide much of an incentive for GA aircraft operators to relocate. This assessment is further supported by the belief that the vast majority of GA aircraft operators required to have Mode C transponders will have acquired them by December 30, 1990. This is when the requirement for such equipment at Airport Radar Service Areas goes into effect.

The FAA recognizes the possibility that lost revenues incurred by some FBOs outside of the Mode C veil could be offset by revenue gains on the part of FBOs inside the veil. However, there is much uncertainty associated with this possibility due to a lack of information concerning the level of competition among FBOs inside and outside of the Mode C veils throughout the United States. For example, in any given state, the market structure inside of the Mode C veil could resemble a spatial monopoly, in which unit prices for services rendered by FBOs will be higher than that of a more competitive market structure located outside of the veil. If some aircraft operators were to relocate from areas of higher competition to areas of lower competition among FBOs those operators may incur higher charges for services rendered. For those operators who elect to relocate, it can be assumed to be in their best interest to do so. Thus, any additional higher FBO charges aircraft operators incur as the result of relocating will be at least offset by those factors that prompted their decision to relocate. The net change in revenue among FBOs may not be offsetting because of differences in unit prices charged. While it is not known to what extent revenue gains and losses will be offset among FBOs, the FAA, nonetheless, believes that the cost impacts on FBOs will not be significant for those reasons stated in the previous paragraphs.

### **Benefits**

This final rule is expected to generate potential benefits in the form of increased convenience to GA aircraft operators (without Mode C transponders) and enhanced operation efficiency to FAA air traffic control.

For GA aircraft operators, this rule is expected to generate potential benefits in the form of increased convenience. Prior to this rule, GA aircraft operators, without Mode C transponders, could operate at an airport within the Mode C veil but outside of ATC radar coverage only

authorizations during busy periods. This action will better allow ATC to temporarily allocate its personnel and equipment resources to more productive functions.

Although the benefits of this rule have not been quantified, they are expected to be substantial for both the flying public and the FAA.

### **Conclusion**

This rule is not expected to impose costs on either the FAA or society. In addition, this rule will not impose significant costs on the aviation community (FBOs). The FAA estimates that this rule will potentially generate substantial benefits such as increased convenience to some GA aircraft operators and increased operation efficiency to FAA air traffic control. Thus, the FAA firmly believes that this rule is cost-beneficial.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted to ensure that small entities are not unnecessarily and disproportionately burdened by Government regulations. The RFA requires agencies to review rules that may have "a significant economic impact on a substantial number of small entities." This small entities that could be potentially affected by the implementation of the rule are air taxi operators and fixed base operators (FBOs).

In terms of air operators, no cost impacts are anticipated by this rule. This assessment is based on the FAA's estimation that these operators are already equipped with Mode C transponders. They are, in all likelihood, based at airports within the Mode C veil which fall within the radar coverage of ATC. In terms of FBOs, the FAA estimates that this rule will not impose significant costs. This assessment is based on the belief that GA aircraft operators are not likely to impose lost revenues on FBOs by relocating from airports outside of the Mode C veil or undesignated airports within the Mode C veil to designated airports specified in this rule. Although the rule provides greater access to a Mode C veil, the FAA believes that this rule does not provide GA aircraft operators with much of an incentive to relocate. This assessment is further supported by the belief that the vast majority of those GA aircraft operators required to have Mode C transponders will acquire them by December 30, 1990 (Phase II of the Mode C rule for Airport Radar Service Areas). Therefore, the FAA believes that this rule will not have a significant economic impact on substantial number of small entities.

### **International Trade Impact Assessment**

This rule will not have an effect on the sale of foreign aviation products or services in the United States, nor will it have an effect on the sale of U.S. products or services in foreign countries. This is because this rule will neither impose costs on aircraft operators nor aircraft manufacturers (U.S. or foreign) that will result in a competitive disadvantage to either.

### **Federalism Determination**

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.



safety and environmental requirements and procedures and does not alter or supersede those requirements. The FAA's experience with the granting of authorizations since the adoption of the Mode C transponder requirement indicates that there will not be a large number of aircraft operating at any one airport under the authority of this rule. For these reasons, the FAA concludes that the adoption of this rule is categorically excluded from the requirement for further environmental review or assessment pursuant to FAA Order 1050.1D, Policies and Procedures for Considering Environmental Impacts.

### **Conclusion**

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this regulation is not major under Executive Order 12291. In addition, the FAA certifies that this regulation will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This regulation is considered significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979.)

### **The Amendment**

For the reasons set forth in the preamble, the Federal Aviation Administration amends part 91 of the Federal Regulations (14 CFR part 91) effective December 5, 1990.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 (as amended by Pub. L. 100-223), 1422 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et seq.*; E.O. 11514; Pub. L. 100-202; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983).

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## **Special Federal Aviation Regulation No. 62-1**

### **Alteration of the Denver Class B Airspace Area; CO**

**Adopted: September 14, 1993**

**Effective: December 19, 1993**

**(Published in 58 FR 48722, September 17, 1993)**

**SUMMARY:** This action alters the Denver, CO, Class B Airspace Area to coincide with the scheduled opening date of the new Denver International Airport. The new Denver International Airport will replace the Denver Stapleton International Airport. This action will enable air traffic control (ATC) to provide terminal ATC service to turbojet aircraft in Class B airspace throughout transition to and from the en route structure. The lateral limits of the Class B airspace area will extend to 30 nautical miles from Denver International Airport to provide an area in which ATC can provide control services throughout critical maneuvering phases of flight operations in the terminal area. The upper limits of the Class B airspace area will increase to 12,000 feet mean sea level (MSL). This action will enhance air traffic procedures and simplify visual flight rules (VFR) transient operations outside the Class B airspace area. An objective of this action is to increase safety substantially while accommodating the legitimate concerns of airspace users.

## **Background**

Airspace reclassification, which becomes effective September 16, 1993, will discontinue the use of the term "Terminal Control Area" (TCA) and replace it with the designation "Class B airspace." This change in terminology is reflected in this rule. On May 21, 1970, the FAA published amendment No. 91-78 to part 91 of the Federal Aviation Regulations (FAR) that provided for the establishment of Class B airspace areas (35 FR 7782). The Class B Airspace Area program was developed to reduce the midair collision potential in the congested airspace surrounding airports with high density air traffic by providing an area in which all aircraft will be subject to certain operating rules and equipment requirements. The density of traffic and the type of operations being conducted in the airspace surrounding major terminals increase the probability of midair collisions. In 1970, an extensive study found that the majority of midair collisions occurred between a general aviation (GA) aircraft and an air carrier, military, or another GA aircraft. The basic causal factor common to these conflicts was the mix of uncontrolled aircraft operating under VFR and controlled aircraft operating under instrument flight rules (IFR). The establishment of Class B airspace areas provides a method to accommodate the increasing number of IFR and VFR operations. The regulatory requirements of Class B airspace afford the greatest protection for the greatest number of people by providing ATC with an increased capability to provide aircraft separation service, thereby minimizing the mix of controlled and uncontrolled aircraft. To date, the FAA has established a total of 29 Class B airspace areas.

### **Suspension of Certain Aircraft Operations From the Mode C Transponder Requirement**

On June 21, 1988, the FAA published a final rule which required aircraft to have Mode C equipment when operating within 30 nautical miles of any designated Class B airspace area primary airport from the surface up to 10,000 feet MSL, excluding those aircraft not certificated with an engine-driven electrical system, balloons, or gliders (53 FR 23356).

On December 5, 1990, the FAA published Special Federal Aviation Regulation (SFAR) No. 62 which suspends, until December 30, 1993, certain provisions of the regulation requiring the installation and use of automatic altitude-reporting (Mode C) transponders (55 FR 50302). SFAR No. 62 provides access to specified airports within 30 miles of a Class B airspace area primary airport (Mode C veil) for aircraft without Mode C transponders.

Paragraph 7, section 2, of SFAR No. 62 identifies airports within a 30-nautical-mile radius of the Denver Stapleton International Airport where aircraft not equipped with Mode C transponders can operate at and below 1,200 feet above ground level (AGL): (1) within a 2-nautical-mile radius, or, if directed by ATC, within a 5-nautical-mile radius, of a listed airport; and (2) along the most direct and expeditious routing, or a routing directed by ATC between that airport and the outer boundary of the Mode C veil, consistent with established traffic patterns, noise abatement procedures, and safety.

The designation of Denver International Airport as a Class B airspace area primary airport will create a new Mode C veil located within a 30-nautical-mile radius of Denver International Airport. Consequently, the FAA is adding 13 airports to paragraph 7, section 2 of SFAR No. 62. These airports, located approximately 25 to 30 miles from Denver International Airport and outside the Denver Stapleton Mode C veil, are:

- (1) Air Dusters Inc. Airport, Roggen, CO
- (2) Bijou Basin Airport, Byers, CO

- (10) Singleton Ranch Airport, Byers, CO
- (11) Sky Haven Airport, Byers, CO
- (12) Tri-County Airport, Erie, CO
- (13) Westberg-Rosling Farms Airport, Roggen, CO

Additionally, the FAA is removing five airports from paragraph 7, section 2, of SFAR 62 because they are located beyond the Denver International Airport Mode C veil. These airports are:

- (1) Athanasiou Valley Airport, Blackhawk, CO
- (2) Flying J Ranch Airport, Evergreen, CO,
- (3) Marshdale STOL, Evergreen, CO
- (4) Meyer Ranch Airport, Conifer, CO
- (5) Vance Brand Airport, Longmont, CO

#### **User Group Participation**

The alteration of the Denver Class B Airspace Area is the product of discussions with a broad representation of the aviation community. In conjunction with this action, the FAA will continue to work with local user groups to ensure that the Class B airspace area is efficacious for all users by identifying any adjustments or modifications that appear necessary. Through joint FAA and user cooperation, any problems that arise can then be identified and corrective action taken when necessary.

This Class B airspace configuration has been developed through substantial public participation. Informal airspace meetings were held in the Denver area September 11-13, 1990, to allow local aviation interests and airspace users an opportunity to provide input regarding alteration of the Denver Class B Airspace Area. Fourteen written comments were received from private citizens, local government agencies, user groups, and local airport authorities during the public comment period following the informal airspace meetings.

The Denver Ad Hoc Airspace Committee, representing a cross section of the aviation community, was formed; technical assistance and support were supplied by the FAA Northwest Mountain Region. Following the informal meetings and extensive coordination with the airspace user groups, the FAA prepared a proposed TCA configuration. This configuration was published in a Notice of Proposed Rulemaking (NPRM) on August 26, 1992 (57 FR 38724). The NPRM was published prior to the effective date of the Airspace Reclassification Final Rule, and, as stated earlier, under Airspace Reclassification TCA's will become Class B airspace. The coordinates in the proposal were North American Datum 27; however, these coordinates have been updated to North American Datum 83. Class B airspace designations are published in paragraph 3000 of FAA Order 7400.9A, dated June 17, 1993, and effective September 16, 1993, which is incorporated by reference in 14 CFR 71.1 as of September 16, 1993 (58 FR 36298; July 6, 1993). The Class airspace area listed in this document will be published subsequently in the Order.

#### **Discussion of Comments**

The FAA received 27 comments in response to the NPRM. The FAA has considered these comments in adopting this final rule. All commenters supported the alteration of the Denver Class B Airspace Area to coincide with the opening of the new Denver International Airport; 21 commenters suggested some minor changes.

The Helicopter Association International (HAI) expressed concern about raising the upper limits of the Class B airspace area above 10,000 feet MSL without VFR routes or flyways.

One commenter opposed raising the ceiling from 10,000 to 12,000 feet MSL (and erroneously assumed the FAA was extending the outer boundary of the Class B airspace area from 40 to 60 miles), calling the proposed Class B airspace area too large and, therefore, overly restrictive. He suggested limiting the ceiling to 10,000 feet and the outer boundary to 40 miles in diameter. He stated that a smaller Class B airspace area would be more desirable to users and that fewer ATC procedures imposed on the users would be more beneficial.

The FAA disagrees with the commenter. The FAA is modifying the Denver Class B Airspace Area to encompass airspace from the surface or higher within a 30-mile radius of the Denver International Airport up to and including 12,000 feet MSL. The FAA believes that this action will provide the highest degree of safety while preserving the most efficient use of the available terminal airspace.

Nine commenters suggested, in an effort to increase safety and reduce Class B airspace area infractions, relocating the proposed center of the Denver Class B Airspace Area to the Mile High Very High Frequency Omnidirectional Range (VOR). They also suggested raising the floor of the area defined by the 10- and 20-nautical-mile rings and the Denver VOR 156° and 090° radials from 8,000 to 9,000 feet MSL.

The FAA cannot accommodate these suggestions. Relocating the Center of the Class B airspace area to the Mile High VOR would impact the FAA's ability to provide simultaneous parallel instrument landing system (ILS) approaches to three parallel runways. The floors were established to contain IFR procedures at Denver International Airport in Class B airspace, and raising the floors would place these operations outside the Class B airspace.

Several commenters, including the Colorado Pilots Association and the Aircraft Owners and Pilots Association, claimed that the Class B airspace area configuration lacked visual references or prominent landmarks for VFR navigation around the Denver Class B Airspace Area. Also, they requested that access routes in the form of transition routes and flyway routes be developed to accommodate the VFR user.

The FAA has, to the extent practical, used geographical landmark and coordinates to delineate the boundaries of the Class B airspace area. When the new Denver Class B Airspace Area becomes effective, the current VFR Terminal Area Chart will become obsolete for navigational purposes. The FAA will issue a new Terminal Area Chart to be used for navigational purposes within the Class B airspace area. To assist the flying public, the flyway chart on the Denver VFR Terminal Area Chart will contain the VFR landmarks published on the existing VFR Terminal Area Chart, additional VFR landmarks, recommended VFR flyways, and recommended altitudes.

One commenter suggested that the floor of the Class B airspace area north of the Denver International Airport, Area J, be raised from 7,000 to 8,000 feet MSL and that the floor of Area N be raised from 8,000 to 9,000 or 10,000 feet MSL. The commenter stated that these altitude changes would allow obstruction clearance from a tower located between the Firestone Airport and Platte Valley Airport. He also suggested that the outer boundary limits of the Class B airspace area be reduced from 30 to 25 nautical miles, with a further reduction to 20 nautical miles between the Denver VOR 090° and 270° radials. Finally, the commenter stated that the Class B airspace area configuration conflicts with the instrument approach procedures into Fort Collins-Loveland Airport and creates a likelihood of inadvertent penetration into the Class B airspace area during instrument training and proficiency flights.

sufficient obstruction clearance from the tower located between Firestone Airport and Platte Valley Airport.

The City and County of Denver (the City) objected to the proposed cutouts to the inner 10-nautical-mile core of the Class B airspace area, specifically Areas B, C, and D. For Area B, Denver requested that the floor of the cutout for Buckley Air National Guard Base (Buckley) be reduced from 7,500 to 7,200 feet MSL. It also requested that Gun Club Road on the east side of Buckley be used as the boundary of the cutout and that the edge be extended directly along the east edge of the residential development north of Sand Creek to the interchange of Gun Club Road and Interstate 70. The City indicated that this would still enable VFR arrivals and departures on Buckley's runway 14, standard arrival and departure patterns to the west of the base, and a teardrop arrival onto runway 32 from the south in the absence of positive control. The City claimed that using these landmarks would reduce the width of the cutout to the east and allow a partial divergence of  $7.5^\circ$  for departures from Denver International Airport's runway 17R. The City also claimed that this angle, when coupled with a similar departure divergence to the east, increases the departure capacity on runway 17R by virtue of establishing a  $15^\circ$  divergence capability.

The City also recommended that language in the final rule address revocation of the airspace in Area C. It indicated that its recommendation was based on the foreseeable closure of Aurora Airpark and that appropriate language in this final rule would eliminate the need for future rulemaking to reevaluate the airspace. The City recommended that, during the interim between this final rule and the closure of Aurora, the width of the east boundary be reduced to an area that more adequately represents its limited use, and that aircraft arriving and departing Aurora Airpark be required to use the north-south access. It also recommended that after Aurora closes, the severed area should then be incorporated into Area A, which extends from the surface to 12,000 feet MSL.

The City objected to providing a cutout for Front Range Airport (FTG) and requested that Area D be eliminated by extending the Class B airspace area down to the surface of Area D. It expressed concern about an anticipated high level of student training activity at FTG and the proposed operations of a cargo carrier that will be moving its base to FTG. The City also claimed a potential conflict between westbound aircraft departing FTG and northbound aircraft arriving at the new Denver International Airport because FTG traffic has approximately 2 miles to turn inside the Area D cutout. The City cited a need for positive control at all times and stated that the airspace in Areas A and C should extend upward from the surface to and including 12,000 feet MSL.

Further, the City stated that the potential still exists within the Class B airspace area for a catastrophic consequence, such as a midair collision, because the distance between Denver International Airport's runway 35R and FTG's runway 8L is only 4 nautical miles. It claims that by comparison, the closest runway ends at Dallas/Ft. Worth International Airport and Dallas Love Field are 7.5 nautical miles.

The FAA disagrees with the City's recommendation on providing language in this final rule that would revoke airspace in Area C should the Aurora Airpark close in the foreseeable future. This issue will require the appropriate rulemaking action to modify the Class B airspace for that area.

The FAA considered all comments in the adoption of the final Class B airspace area design. The City's suggestions for altering Area B's boundary are not adopted in this final rule. The FAA disagrees with the City's claims that there will be a potential conflict between

the altitude of Area B will impact Buckley's mission in its role in national defense, as stated in the NPRM. The elimination of Areas C and D would require operators at the Aurora Airpark and FTG to obtain an air traffic clearance to operate in and out of those airports. In the case of instrument flight rules departures, pilots would be required to contact the Denver Tower to obtain a clearance, along with a release time and a clearance void time. Because of the length of time the released airspace would have to be protected, the FAA determined that pilots would encounter lengthy delays if the City's suggestions were adopted. Arriving aircraft could also experience delays, depending on traffic at the Denver International Airport. Further, since Denver submitted its comments, the FAA has learned that the cargo carrier will not be moving its base operations to FTG. The FAA however, will continue to monitor air traffic activity at FTG.

The Colorado Army National Guard requested that the floor of Area C be raised from 6,200 feet MSL to either 6,300 or 6,500 feet MSL, or that the northern boundary of Area C be moved south, but no farther than 2 miles south of I-70, to allow the floor of Area C to be at least 6,300 feet MSL. It stated that the additional altitude would allow a significant increase in the margin of safety for its aircraft departing eastbound during night operations. It further stated that the lighting system of a 306-foot tower in the southeast portion of Area C has a history of faulty operation and that a pilot unfamiliar with the area, transitioning at 6,200 feet MSL, may be at substantial risk.

The FAA agrees and is establishing the floor of Area C at 6,500 feet MSL to enhance obstruction clearance for VFR aircraft traversing underneath the floor of Area C.

Additional commenters suggest that the base altitude for Area B be lowered from 7,500 to 7,200 feet MSL, that Area D be eliminated and incorporated into Area A, and that Area C be eliminated or reduced in size.

The FAA cannot support these suggested modifications of the Class B airspace area. The floor of the Class B airspace area was established to contain IFR procedures at Denver International Airport in the Class B airspace area. The FAA believes that the floor of the Class B airspace area in Areas B, C, and D south of Denver International Airport, will allow ample airspace for safe aircraft operations in the vicinity of Buckley Air National Guard (ANG) Base and provide obstruction clearance.

The Soaring Society of America (SSA) and Collegiate Soaring Association suggested that the southern Class B airspace area boundary be realigned to coincide with Colorado Highway 86 between Castle Rock and I-25 on the west through Franktown, Elizabeth, and Kiowa, CO. The Association stated that a cutout for Areas L and M would reduce the Class B airspace area radius by 5 nautical miles and would enhance safety by making it easier for pilots to avoid inadvertent incursions into the Class B airspace area. The SSA requested that the FAA maintain the current "Wave Window" Letters of Agreement to allow high altitude wave soaring.

The FAA believes that the alteration of the southern boundary is not necessary and that this area allows ample visual landmarks for uncontrolled VFR traffic to avoid the Denver Class B airspace boundary. The FAA will continue, however, to support the designated soaring areas through Letters of Agreement between the soaring organizations. This action will allow the soaring organizations to proceed without disrupting their operations and will continue to serve the general aviation community.

In sum, the FAA will alter the Class B airspace area as proposed in the NPRM, except the Area C floor will be raised to 6,500 feet.

To support their request, they argued that printing new baggage tags would impose a financial burden if the new airport was not permanently assigned the DEN identifier, and flight planning would be affected only minimally, if at all, by reassigning the DEN designator to the new airport.

In response to their request, the FAA determined that the location identifier for Denver Stapleton International Airport—DEN—will be reassigned to the new airport and will replace DVX when the new airport opens. Further, the location identifier for the Denver VORTAC (DEN) will be reassigned to the Denver VOR, which will be commissioned when the airport opens. The Denver VORTAC will be decommissioned at the same time.

### **The Rule**

These amendments to parts 71 and 91 of the Federal Aviation Regulations (FAR) modify the Class B airspace area at Denver to coincide with the establishment of the new Denver International Airport. The Denver International Airport will replace the Denver Stapleton International Airport. This alteration will better serve the users, as well as the FAA, by providing airspace configured to contain the new procedures that will be implemented at Denver. The FAA has determined that modifying the Class B airspace area to coincide with the relocation of the new Denver International Airport is in the interest of flight safety and will result in a greater degree of protection for the greatest number of people during flight in the terminal area. The alteration is depicted on the attached chart.

The modified configuration considers the present terminal area flight operations and terrain as follows:

1. The inner core of the Class B airspace area includes airspace 10 nautical miles from the Denver VOR from the surface to and including 12,000 feet MSL. There are cutouts for five airports in the inner core of the Class B airspace area: Aurora, Buckley ANG Base, Front Range, Heckendorf, and Brighton Van Aire. The floor of the Class B airspace area in these areas varies from 6,500 to 7,500 feet MSL. This airspace will contain instrument approach and departure procedures for Denver International Airport and allow adequate airspace for operations at the above airports without affecting aircraft transitioning to final approach visually or on radar vectors for an instrument approach into Denver International Airport. Bromley Lane depicts the northern boundary of the inner core of the Class B airspace area. The vertical limit of the entire Class B airspace area will be 12,000 feet MSL.

2. The intermediate area includes airspace between 10 and 20 nautical miles from the Denver VOR, including airspace extending west to Wadsworth Boulevard and Colorado Highway 287 and bounded, in part, on the north by Colorado Highway 7 and on the south by Hampden Avenue. The intermediate area contains subarea floors that vary from 6,000 to 8,000 feet MSL. This airspace will provide to a stepdown profile to contain aircraft in the radar traffic pattern transitioning to the final approach course from their downwind and base legs for the primary airport. It also will provide airspace for departures transitioning to the en route environment.

3. The outer area, between the 20- and 30-nautical-mile radius from the Denver VOR, contains floors varying from 8,000 to 10,000 feet MSL. This airspace will provide an area to contain aircraft during climb and descent profiles to transition between the terminal and en route structure, and it will allow VFR aircraft to circumnavigate the Class B airspace area. Arriving turbojet and turboprop aircraft will enter terminal airspace from four designated areas. The configuration of the outer area is designed to allow sufficient airspace for departures

that airspace. Modifying this Class B airspace area will enhance the safety of flight within the congested airspace overlying the Denver metropolitan area by facilitating the separation of controlled and uncontrolled flight operations.

The FAA is amending SFAR No. 62 by adding 13 airports located within a 30-nautical-mile radius of the Denver International Airport. The FAA is removing five airports from paragraph 7, section 2, of SFAR No. 62 because they are located beyond the Denver International Airport Mode C veil. This action will allow operators, without Mode C transponders, access to the airports listed in paragraph 7, section 2, of SFAR No. 62.

### **Paperwork Reduction Act**

There are no requirements for information collection associated with this rule requiring approval from the Office of Management and Budget pursuant to the Paperwork Reduction Act of 1990 (Pub. L. 96-511).

### **Regulatory Evaluation Summary**

#### *Introduction*

Executive Order 12291 established the requirement that, within the extent permitted by law, a Federal regulatory action may be undertaken only if the potential benefits to society for the regulation outweigh the potential costs to society. In response to this requirement, and in accordance with Department of Transportation policies and procedures, the FAA has estimated the anticipated benefits and costs of the rulemaking action. The results are summarized in this section. For more detailed economic information, see the full regulatory evaluation contained in the docket.

#### *Benefit-Cost Analysis*

The final rule will extend the lateral limits of the Denver Class B airspace area to 30 nautical miles from the Denver International Airport to provide an area in which ATC can provide services throughout critical maneuvering phases of flight operations in the terminal area. The new Denver International Airport is replacing Denver Stapleton International Airport.

This rule will raise the upper limits of the Class B airspace area from 11,000 to 12,000 feet MSL. In addition, this final rule will extend the lateral limits of the Class B airspace area from 20 to 30 nautical miles from Denver International Airport. To a lesser extent, the rule will also eliminate Class B airspace by 4 nautical miles in the western boundaries.

The final rule will enhance aviation safety by lowering the risk of midair collisions through ATC's increased capability to separate all aircraft in terminal airspace in and around the Denver area, while accommodating the legitimate concerns of airspace users.

#### *Costs*

The FAA has determined that modification to the Denver Class B Airspace Area will impose costs of \$195,000 on the FAA to revise the aeronautical charts of the Denver area. No costs will be imposed on aircraft operators.

#### *Costs to the FAA*

The final rule will not impose any additional administrative cost on the FAA for either personnel or equipment. The additional operations workload generated by the final rule will be absorbed by current personnel and equipment resources in place at the Denver International



a special printing must be made to reflect the new Class B airspace area. The FAA estimates that the onetime cost of this off-cycle printing, which includes changing the printing plates, is \$195,000.

### *Costs to Aircraft Operators*

In terms of aircraft operators, the final rule will not impose any additional cost in the form of avionics equipment. The final rule will not adversely impact aircraft operators who operate under IFR, primarily large air carriers, business jets, commuters, and air taxis.

The final rule could, however, potentially impact aircraft operators who routinely operate under VFR, primarily operators of small GA airplanes and other GA aircraft operators such as glider pilots and balloonists. Potential costs to aircraft operators without Mode C transponders have already been accounted for by the Mode C rule. The potentially affected GA aircraft operators are assumed to already have the other types of avionics equipment (such as operable two-way radio) required for entering a Class B airspace area. The only aircraft without Mode C transponders would be aircraft not originally certificated with an engine-driven electric system, or which have not subsequently been certified with such a system installed. Costs to these types of aircraft have already been accounted for by the Mode C rule.

As a result of the final rule, segments of the Class B airspace area lateral boundaries will be expanded from 20 to 30 nautical miles, and floors will range from 8,000 to 10,000 feet MSL in the outer area of the Class B airspace area. This configuration will allow GA airplane operators, glider pilots, and balloonists to circumnavigate the Denver Class B Airspace Area in a manner that would require little deviation from current flying practices. Operators will be permitted to operate beneath the floors in the expanded segments of the Class B airspace area lateral boundaries primarily to the east of Denver International Airport. The final rule will not have an adverse impact on GA student pilots because they rarely fly in airspace above 10,000 feet MSL. In nearly all instances, a floor of 10,000 feet MSL is considered to be sufficient space to allow GA student pilots to conduct their flying underneath the expanded segments of the Class B airspace area lateral boundaries.

Because the existing floors (primarily to the west of Denver International Airport) take into account high terrain, sufficient airspace for sports parachutists to conduct jumps would still be available without Class B airspace area involvement. Thus, balloonists and ultra-light and sailplane operators will not be significantly affected by the final rule. Letters of agreement are expected to be executed, where advisable, to ensure minimum effect on these operators.

### *Benefits*

The final rule is expected to generate benefits primarily in the form of enhanced safety to the aviation community and the flying public. These benefits, for instance, will take the form of reduced risk of aviation fatalities and property damage as the result of a lowered risk of midair collisions.

The alteration of the Denver Class B Airspace Area will create more controlled airspace by increasing the ceiling from 11,000 to 12,000 feet MSL and extending, from 20 to 30 nautical miles, the northern, southern, and eastern lateral boundaries. Because the nature of this rule is proactive, or to prevent a safety problem from developing, the potential safety benefits are extremely difficult to quantify in monetary terms.

In this case, the potential safety problem derives from an increased complexity (or density) of aircraft operations in the vicinity of the present ceiling and lateral boundaries of the Denver Class B Airspace Area. As a result of this increased complexity, the regulatory airspace will

final rule, aviation safety in the Denver Class B Airspace Area could deteriorate significantly, increasing the potential for catastrophic consequences, such as a midair collision between a large air carrier airplane and a GA airplane. This action is intended to significantly reduce the risk of those consequences thereby enhancing aviation safety.

The final rule will also generate benefits by eliminating four nautical miles of Class B airspace west of the Jefferson County airport. The reduction in Class B airspace is intended to provide two types of benefits. First, the rule will reduce the distance aircraft operators flying under VFR will have to travel to circumnavigate the Class B airspace area without concerns related to high terrain. The existing floor in this section of airspace is 7,000 feet MSL, which requires that nonparticipating aircraft pilots be very vigilant in flying over high terrain areas. VFR operators will be able to fly at higher altitudes when this section is removed from the Denver terminal airspace. Second, the rule will align areas near and in the Class B airspace area with better visual landmarks so that aircraft operators flying under VFR can stay clear of the Class B airspace area.

It is important to note that the Mode C and TCAS rules currently in effect share the same objective of lowering the risk of a midair collision as the alteration of the Denver Class B Airspace Area. Consequently the safety benefits of this final rule and the Mode C and TCAS rules are inseparable and cannot be estimated independently of each other.

### *Conclusions*

The benefits of the rule will be primarily in the form of enhanced safety to the aviation community and the flying public. The one-time cost of the rule will be \$195,000 to revise the aeronautical charts for the Denver area. This cost will be borne solely by the FAA. The FAA could eliminate this cost by printing the charts during the routine printing-cycle, but this would entail delaying the opening of Denver International Airport. The cost of this delay would be considerably higher than \$195,000. The FAA willingly incurs this charting cost to facilitate the opening of the new Denver International Airport. Thus, the FAA contends that this rule is cost-beneficial.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted to ensure that small entities are not unnecessarily and disproportionately burdened by Government regulations. The RFA requires agencies to review final rules which may have "a significant economic impact on a substantial number of small entities." The small entities which could be potentially affected by the implementation of this final rule are unscheduled operators of aircraft for hire owning nine or fewer aircraft.

Only those unscheduled aircraft operators without the capability to operate under IFR conditions will be potentially impacted by this final rule. The FAA believes that all of the potentially impacted unscheduled aircraft operators are already equipped to operate under IFR conditions. This is because such operators fly regularly in airports where radar approach control services have been established. Therefore, the FAA believes this final rule will not have a significant economic impact on a substantial number of small entities.

### **International Trade Impact Assessment**

The final rule will neither have an effect on the sale of foreign aviation products or services in the United States, nor will it have an effect on the sale of U.S. products or

Executive Order 12012, it is determined that this regulation will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Assessment, the FAA has determined that this regulation is not major under Executive Order 12291. In addition, the FAA certifies that this regulation will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This rule is considered significant under DOT regulatory Policies and Procedures (44 FR 11034, February 26, 1979). A final regulatory evaluation of this rule, including a Regulatory Flexibility Determination and Trade Impact Assessment, has been placed in the docket. A copy may be obtained by contacting the person identified under "FOR FURTHER INFORMATION CONTACT."

### **The Amendment**

In consideration of the foregoing, the Federal Aviation Administration amends parts 71 and 91 of the Federal Aviation Regulations (14 CFR parts 71 and 91) effective December 19, 1993.

The authority citation for 14 CFR part 91 continues to read as follows:

*Authority:* 49 U.S.C. app. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et seq.*; E.O. 11514, 35 FR 4247, 3 CFR, 1966-1970 Comp., p. 902; 49 U.S.C. 106(g).

Special Federal Aviation Regulation No. 62 section 2, paragraph 7 is revised.

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area is referred to as the Mode C veil.

(b) Effective until December 30, 1993, the transponder with automatic altitude reporting capability requirements of § 91.215(b)(2) do not apply to the operation of an aircraft:

(1) in the airspace at or below the specified altitude and within a 2-nautical-mile radius, or, if directed by ATC, within a 5-nautical mile radius, of an airport listed in Section 2 of this SFAR; and

(2) in the airspace at or below the specified altitude along the most direct and expeditious routing, or on a routing directed by ATC, between an airport listed in Section 2 of this SFAR and the outer boundary of the Mode C veil airspace overlying that airport, consistent with established traffic patterns, noise abatement procedures, and safety.

**Section 2.** Effective until December 30, 1993. Airports at which the provisions of § 91.215(b)(2) do not apply.

(1) Airports within a 30-nautical-mile radius of The William B. Hartsfield Atlanta International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Air Acres Airport, Woodstock, GA	5GA4	1,500
B & L Strip Airport, Hollonville, GA	GA29	1,500
Camfield Airport, McDonough, GA	GA36	1,500
Cobb County-McCollum Field Airport, Marietta, GA	RYY	1,500
Covington Municipal Airport, Covington, GA	9A1	1,500
Diamond R Ranch Airport, Villa Rica, GA	3GA5	1,500
Dresden Airport, Newnan, GA	GA79	1,500
Eagles Landing Airport, Williamson, GA	5GA3	1,500
Fagundes Field Airport, Haralson, GA	6GA1	1,500
Gable Branch Airport, Haralson, GA	5GA0	1,500
Georgia Lite Flite Ultralight Airport, Acworth, GA	31GA	1,500
Griffin-Spalding County Airport, Griffin, GA	6A2	1,500
Howard Private Airport, Jackson, GA	GA02	1,500
Newnan Coweta County Airport, Newnan, GA	CCO	1,500
Peach State Airport, Williamson, GA	3GA7	1,500
Poole Farm Airport, Oxford, GA	2GA1	1,500
Powers Airport, Hollonville, GA	GA31	1,500
S & S Landing Strip Airport, Griffin, GA	8GA6	1,500
Shade Tree Airport, Hollonville, GA	GA73	1,500

(2) Airports within a 30-nautical-mile radius of the General Edward Lawrence Logan International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Berlin Landing Area Airport, Berlin, MA	MA19	2,500
Hopedale Industrial Park Airport, Hopedale, MA	IB6	2,500
Larson's SPB, Tyngsboro, MA	MA74	2,500
Moore AAF, Ayer/Fort Devens, MA	AYE	2,500
New England Gliderport, Salem, NH	NH29	2,500
Plum Island Airport, Newburyport, MA	2B2	2,500

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Arant Airport, Wingate, NC	1NC6	2,500
Bradley Outernational Airport, China Grove, NC	NC29	2,500
Chester Municipal Airport, Chester, SC	9A6	2,500
China Grove Airport, China Grove, NC	76A	2,500
Goodnight's Airport, Kannapolis, NC	2NC8	2,500
Knapp Airport, Marshville, NC	3NC4	2,500
Lake Norman Airport, Mooresville, NC	14A	2,500
Lancaster County Airport, Lancaster, SC	LKR	2,500
Little Mountain Airport, Denver, NC	66A	2,500
Long Island Airport, Long Island, NC	NC26	2,500
Miller Airport, Mooresville, NC	8A2	2,500
US Heliport, Wingate, NC	NC56	2,500
Unity Aerodrome Airport, Lancaster, SC	SC76	2,500
Wilhelm Airport, Kannapolis, NC	6NC2	2,500

(4) Airports within a 30-nautical-mile radius of the Chicago O'Hare International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Aurora Municipal Airport, Chicago/Aurora, IL	ARR	1,200
Donald Alfred Gade Airport, Antioch, IL	IL11	1,200
Dr. Joseph W. Esser Airport, Hampshire, IL	7IL6	1,200
Flying M. Farm Airport, Aurora, IL	IL20	1,200
Fox Lake SPB, Fox Lake, IL	IS03	1,200
Graham SPB, Crystal Lake, IL	IS79	1,200
Herbert C. Mass Airport, Zion, IL	IL02	1,200
Landings Condominium Airport, Romeoville, IL	C49	1,200
Lewis University Airport, Romeoville, IL	LOT	1,200
Mc Henry Farms Airport, McHenry, IL	44IL	1,200
Olson Airport, Plato Center, IL	LL53	1,200
Redeker Airport, Milford, IL	IL85	1,200
Reid RLA Airport, Gilberts, IL	6IL6	1,200
Shamrock Beef Cattle Farm Airport, Mc Henry, IL	49LL	1,200
Sky Soaring Airport, Union, IL	55LL	1,200
Waukegan Regional Airport, Waukegan, IL	UGN	1,200
Wormley Airport, Oswego, IL	85LL	1,200

(5) Airports within a 30-nautical-mile radius of the Cleveland-Hopkins International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Akron Fulton International Airport, Akron, OH	AKR	1,300
Bucks Airport, Newbury, OH	400H	1,300
Derecsky Airport, Auburn Center, OH	60I0	1,300
Hannum Airport, Streetsboro, OH	690H	1,300
Kent State University Airport, Kent, OH	1G3	1,300
Lost Nation Airport, Willoughby, OH	LNN	1,300
Mills Airport, Mantua, OH	OH06	1,300
Portage County Airport, Ravenna, OH	29G	1,300
Stoney's Airport, Ravenna, OH	0I32	1,300
Wadsworth Municipal Airport, Wadsworth, OH	3G3	1,300

Flying V Airport, Sanger, TX	71XS	1,800
Graham Ranch Airport, Celina, TX	TX44	1,800
Haire Airport, Bolivar, TX	TX33	1,800
Hartlee Field Airport, Denton, TX	1F3	1,800
Hawkin's Ranch Strip Airport, Rhome, TX	TA02	1,800
Horseshoe Lake Airport, Sanger, TX	TE24	1,800
Ironhead Airport, Sanger, TX	T58	1,800
Kezer Air Ranch Airport, Springtown, TX	61F	1,800
Lane Field Airport, Sanger, TX	58F	1,800
Log Cabin Airport, Aledo, TX	TX16	1,800
Lone Star Airpark Airport, Denton, TX	T32	1,800
Rhome Meadows Airport, Rhome, TX	TS72	1,800
Richards Airport, Krum, TX	TA47	1,800
Tallows Field Airport, Celina, TX	79TS	1,800
Triple S Airport, Aledo, TX	42XS	1,800
Warshun Ranch Airport, Denton, TX	4TA1	1,800
Windy Hill Airport, Denton, TX	46XS	1,800
Aero Country Airport, McKinney, TX	TX05	1,400
Bailey Airport, Midlothian, TX	7TX8	1,400
Bransom Farm Airport, Burleson, TX	TX42	1,400
Carroll Air Park Airport, De Soto, TX	F66	1,400
Carroll Lake-View Airport, Venus, TX	70TS	1,400
Eagle's Nest Estates Airport, Ovilla, TX	2T36	1,400
Flying B Ranch Airport, Ovilla, TX	TS71	1,400
Lancaster Airport, Lancaster, TX	LNC	1,400
Lewis Farm Airport, Lucas, TX	6TX1	1,400
Markum Ranch Airport, Fort Worth, TX	TX79	1,400
McKinney Municipal Airport, McKinney, TX	TK1	1,400
O'Brien Airpark Airport, Waxahachie, TX	F25	1,400
Phil L. Hudson Municipal Airport, Mesquite, TX	HQZ	1,400
Plover Heliport, Crowley, TX	82Q	1,400
Venus Airport, Venus, TX	75TS	1,400

(7) Airports within a 30-nautical-mile radius of the [Denver] International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
[Air Dusters Inc. Airport, Roggen, CO	49CO	1,200
Bijou Basin Airport, Byers, CO	CD17	1,200
Boulder Municipal Airport, Boulder, CO	1V5	1,200
Bowen Farms No. 1 Airport, Littleton, CO	CO98	1,200
Bowen Farms No. 2 Airport, Strasburg, CO	3CO5	1,200
Carrera Airpark Airport, Mead, CO	93CO	1,200
Cartwheel Airport, Mead, CO	0CO8	1,200
Chaparral Airport, Byers, CO	CO18	1,200
Colorado Antique Field Airport, Niwot, CO	8CO7	1,200
Comanche Livestock Airport, Strasburg, CO	59CO	1,200
Dead Stick Ranch Airport, Kiowa, CO	18CO	1,200
Frederick-Firestone Air Strip Airport, Frederick, CO	CO58	1,200
Frontier Airstrip Airport, Mead, CO	84CO	1,200
Horseshoe Landings Airport, Keenesburg, CO	CO60	1,200
Hoy Airstrip Airport, Bennett, CO	76CO	1,200
J & S Airport, Bennett, CO	CD14	1,200
Kostroski Airport, Franktown, CO	43CO	1,200

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Platte Valley Airport, Hudson, CO	18V	1,200
Rancho De Aereo Airport, Mead, CO	05CO	1,200
Reid Ranches Airport, Roggen, CO	7CO6	1,200
Singleton Ranch Airport, Byers, CO	68CO	1,200
Sky Haven Airport, Byers, CO	CO17	1,200
Spickard Farm Airport, Byers, CO	5CO4	1,200
Tri-County Airport, Erie, CO	48V	1,200
Westberg-Rosling Farms Airport, Roggen, CO	74CO	1,200
Yoder Airstrip Airport, Bennett, CO	CD09	1,200

(8) Airports within a 30-nautical-mile radius of the Detroit Metropolitan Wayne County Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Al Meyers Airport, Tecumseh, MI	3TE	1,400
Brighton Airport, Brighton, MI	45G	1,400
Cackleberry Airport, Dexter, MI	2MI9	1,400
Erie Aerodome Airport, Erie, MI	05MI	1,400
Ham-A-Lot Field Airport, Petersburg, MI	MI48	1,400
Merillat Airport, Tecumseh, MI	34G	1,400
Rossettie Airport, Manchester, MI	75G	1,400
Tecumseh Products Airport, Tecumseh, MI	0D2	1,400

(9) Airports within a 30-nautical-mile radius of the Honolulu International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Dillingham Airfield Airport, Mokuleia, HI	HDH	2,500

(10) Airports within a 30-nautical-mile radius of the Houston Intercontinental Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Ainsworth Airport, Cleveland, TX	0T6	1,200
Biggin Hill Airport, Hockley, TX	0TA3	1,200
Cleveland Municipal Airport, Cleveland, TX	6R3	1,200
Fay Ranch Airport, Cedar Lane, TX	0T2	1,200
Freeman Property Airport, Katy, TX	61T	1,200
Gum Island Airport, Dayton, TX	3T6	1,200
Harbican Airpark Airport, Katy, TX	9XS9	1,200
Harold Freeman Farm, Airport, Katy, TX	8XS1	1,200
Hoffpauir Airport, Katy, TX	59T	1,200
Horn-Katy Hawk International Airport, Katy, TX	57T	1,200
Houston-Hull Airport, Houston, TX	SGR	1,200
Houston-Southwest Airport, Houston, TX	AXH	1,200
King Air Airport, Katy, TX	55T	1,200
Lake Bay Gall Airport, Cleveland, TX	0T5	1,200
Lake Bonanza Airport, Montgomery, TX	33TA	1,200
R W J Airpark Airport, Baytown, TX	54TX	1,200
Westheimer Air Park Airport, Houston, TX	5TA4	1,200



East Kansas City Airport, Grain Valley, MO	K89	1,000
Excelsior Springs Memorial Airport, Excelsior Springs, MO	3GV	1,000
Flying T Airport, Oskaloosa, KS	3EX	1,000
Hermon Farm Airport, Gardner, KS	7KS0	1,000
Hillside Airport, Stilwell, KS	KS59	1,000
Independence Memorial Airport, Independence, MO	63K	1,000
Johnson County Executive Airport, Olathe, KS	31P	1,000
Johnson County Industrial Airport, Olathe, KS	OJC	1,000
Kimray Airport, Plattsburg, MO	IXD	1,000
Lawrence Municipal Airport, Lawrence, KS	7M07	1,000
Martins Airport, Lawson, MO	LWC	1,000
Mayes Homestead Airport, Polo, MO	21MO	1,000
McComas-Lee's Summit Municipal Airport, Lee's Summit, MO	37MO	1,000
Mission Road Airport, Stilwell, KS	K84	1,000
Northwood Airport, Holt, MO	64K	1,000
Plattsburg Airpark Airport, Plattsburg, MO	2M02	1,000
Richards-Gebaur Airport, Kansas City, MO	M028	1,000
Rosecrans Memorial Airport, St. Joseph, MO	GVW	1,000
Runway Ranch Airport, Kansas City, MO	STJ	1,000
Sheller's Airport, Tonganoxie, KS	2M09	1,000
Shomin Airport, Oskaloosa, KS	11KS	1,000
Stonehenge Airport, Williamstown, KS	0KS1	1,000
Threshing Bee Airport, McLouth, KS	71KS	1,000
	41K	1,000

(12) Airports within a 30-nautical-mile radius of the McCarran International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Sky Ranch Estates Airport, Sandy Valley, NV	3L2	2,500

(13) Airports within a 30-nautical-mile radius of the Memphis International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Bernard Manor Airport, Earle, AR	65M	2,500
Holly Springs-Marshall County Airport, Holly Springs, MS	M41	2,500
McNeely Airport, Earle, AR	M63	2,500
Price Field Airport, Joiner, AR	8OM	2,500
Tucker Field Airport, Hughes, AR	78M	2,500
Tunica Airport, Tunica, MS	30M	2,500
Tunica Municipal Airport, Tunica, MS	M97	2,500

(14) Airports within a 30-nautical-mile radius of the Minneapolis-St. Paul International Wold-Chamberlain Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Belle Plaine Airport, Belle Plaine, MN	7Y7	1,200
Carleton Airport, Stanton, MN	SYN	1,200
Empire Farm Strip Airport, Bongards, MN	MN15	1,200
Flying M Ranch Airport, Roberts, WI	78WI	1,200
Johnson Airport, Rockford, MN	MY86	1,200

Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Bollinger SPB, Larose, LA	L38	1,500
Clovelly Airport, Cut Off, LA	LA09	1,500

(16) Airports within a 30-nautical-mile radius of the John F. Kennedy International Airport, the La Guardia Airport, and the Newark International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Allaire Airport, Belmar/Farmingdale, NJ	BLM	2,000
Cuddihy Landing Strip Airport, Freehold, NJ	NJ60	2,000
Ekdahl Airport, Freehold, NJ	NJ59	2,000
Fla-Net Airport, Netcong, NJ	0NJ5	2,000
Forrestal Airport, Princeton, NJ	N21	2,000
Greenwood Lake Airport, West Milford, NJ	4N1	2,000
Greenwood Lake SPB, West Milford, NJ	6NJ7	2,000
Lance Airport, Whitehouse Station, NJ	6NJ8	2,000
Mar Bar L Farms, Englishtown, NJ	NJ46	2,000
Peekskill SPB, Peekskill, NY	7N2	2,000
Peters Airport, Somelle, NJ	4NJ8	2,000
Princeton Airport, Princeton/Rocky Hill, NJ	39N	2,000
Solberg-Hunterdon Airport, Readington, NJ	N51	2,000

(17) Airports within a 30-nautical-mile radius of the Orlando International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Arthur Dunn Air Park Airport, Titusville, FL	X21	1,400
Space Center Executive Airport, Titusville, FL	TIX	1,400

(18) Airports within a 30-nautical-mile radius of the Philadelphia International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Ginns Airport, West Grove, PA	78N	1,000
Hammonton Municipal Airport, Hammonton, NJ	N81	1,000
Li Calzi Airport, Bridgeton, NJ	N50	1,000
New London Airport, New London, PA	N01	1,000
Wide Sky Airpark Airport, Bridgeton, NJ	N39	1,000

(19) Airports within a 30-nautical-mile radius of the Phoenix Sky Harbor International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Ak Chin Community Airfield Airport, Maricopa, AZ	E31	2,500
Boulais Ranch Airport, Maricopa, AZ	9E7	2,500
Estrella Sailport, Maricopa, AZ	E68	2,500

(20) Airports within a 30-nautical-mile radius of the Lambert/St. Louis International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Blackhawk Airport, Old Monroe, MO	6M00	1,000
Lebert Flying L Airport, Lebanon, IL	3H5	1,000
Shafer Metro East Airport, St. Jacob, IL	3K6	1,000
Sloan's Airport, Elsberry, MO	OM08	1,000
Wentzville Airport, Wentzville, MO	M050	1,000
Woodliff Airpark Airport, Foristell, MO	98MO	1,000

(21) Airports within a 30-nautical-mile radius of the Salt Lake City International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Bolinder Field-Tooele Valley Airport, Tooele, UT	TVY	2,500
Cedar Valley Airport, Cedar Fort, UT	UT10	2,500
Morgan County Airport, Morgan, UT	42U	2,500
Tooele Municipal Airport, Tooele, UT	U26	2,500

(22) Airports within a 30-nautical-mile radius of the Seattle Tacoma International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Firstair Field Airport, Monroe, WA	WA38	1,500
Gower Field Airport, Olympia, WA	6WAZ	1,500
Harvey Field Airport, Snohomish, WA	S43	1,500

(23) Airports within a 30-nautical-mile radius of the Tampa International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Hernando County Airport, Brooksville, FL	BKV	1,500
Lakeland Municipal Airport, Lakeland, FL	LAL	1,500
Zephyrhills Municipal Airport, Zephyrhills, FL	ZPH	1,500

(24) Effective until the establishment of the Washington Tri-Area Class B airspace area or December 30, 1993, whichever occurs first: Airports within a 30-nautical-mile radius of the Washington National Airport and Andrews Air Force Base Airport:

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Barnes Airport, Lisbon, MD	MD47	2,000
Bay Bridge Airport, Stevensville, MD	W29	2,000
Castle Marina Airport, Chester, MD	OW6	2,000
Davis Airport, Laytonsville, MD	W50	2,000
Fremont Airport, Kemptown, MD	MD41	2,000
Kentmorr Airpark Airport, Stevensville, MD	3W3	2,000
Montgomery County Airpark Airport, Gaithersburg, MD	GAI	2,000

Lanseair Farms Airport, La Plata, MD	MD97	1,000
Nyce Airport, Mount Victoria, MD	MD84	1,000
Parks Airpark Airport, Nanjemoy, MD	MD54	1,000
Pilots Cove Airport, Tompkinsville, MD	MD06	1,000
Quantico MCAF, Quantico, VA	NYG	1,000
Stewart Airport, St. Michaels, MD	MD64	1,000
U.S. Naval Weapons Center, Dahlgren Lab Airport, Dahlgren, VA	NDY	1,000

(25) Effective upon the establishment of the Washington Tri-Area Class B airspace area: Airports within a 30-nautical-mile radius of the Washington National Airport, Andrews Air Force Base Airport, Baltimore Washington International Airport, and Dulles International Airport.

<i>Airport Name</i>	<i>Arpt ID</i>	<i>Alt. (AGL)</i>
Albrecht Airstrip Airport, Long Green, MD	MD48	2,000
Armacost Farms Airport, Hampstead, MD	MD38	2,000
Barnes Airport, Lisbon, MD	MD47	2,000
Bay Bridge Airport, Stevensville, MD	W29	2,000
Carroll County Airport, Westminster, MD	W54	2,000
Castle Marina Airport, Chester, MD	OW6	2,000
Clearview Airpark Airport, Westminster, MD	2W2	2,000
Davis Airport, Laytonsville, MD	W50	2,000
Fallston Airport, Fallston, MD	W42	2,000
Faux-Burhans Airport, Frederick, MD	3MD0	2,000
Forest Hill Airport, Forest Hill, MD	MD31	2,000
Fort Detrick Helipad Heliport, Fort Detrick (Frederick), MD	MD32	2,000
Frederick Municipal Airport, Frederick, MD	FDK	2,000
Fremont Airport, Kemptown, MD	MD41	2,000
Good Neighbor Farm Airport, Unionville, MD	MD74	2,000
Happy Landings Farm Airport, Unionville, MD	MD73	2,000
Harris Airport, Still Pond, MD	MD69	2,000
Hybarc Farm Airport, Chestertown, MD	MD19	2,000
Kennersley Airport, Church Hill, MD	MD23	2,000
Kentmorr Airpark Airport, Stevensville, MD	3W3	2,000
Montgomery County Airpark Airport, Gaithersburg, MD	GAI	2,000
Phillips AAF, Aberdeen, MD	APG	2,000
Pond View Private Airport, Chestertown, MD	0MD4	2,000
Reservoir Airport, Finksburg, MD	1W8	2,000
Scheeler Field Airport, Chestertown, MD	0W7	2,000
Stolcrest STOL, Urbana, MD	MD75	2,000
Tinsley Airstrip Airport, Butler, MD	MD17	2,000
Walters Airport, Mount Airy, MD	0MD6	2,000
Waredaca Farm Airport, Brookeville, MD	MD16	2,000
Weide AAF, Edgewood Arsenal, MD	EDG	2,000
Woodbine Gliderport, Woodbine, MD	MD78	2,000
Wright Field Airport, Chestertown, MD	MDII	2,000
Aviacres Airport, Warrenton, VA	3VA2	1,500
Birch Hollow Airport, Hillsboro, VA	W60	1,500
Flying Circus Aerodrome Airport, Warrenton, VA	3VA3	1,500
Fox Acres Airport, Warrenton, VA	15VA	1,500
Hartwood Airport, Somerville, VA	8W8	1,500
Horse Feathers Airport, Midland, VA	53VA	1,500
Krens Farm Airport, Hillsboro, VA	14VA	1,500

Aquia Land Shimen Skyport Airport, Newburg, MD	ZW8	1,000
Buds Ferry Airport, Indian Head, MD	MD39	1,000
Burgess Field Airport, Riverside, MD	3W1	1,000
Chimney View- Airport, Fredericksburg, VA	5VA5	1,000
Holly Springs Farm Airport, Nanjemoy, MD	MD55	1,000
Lanseair Farms Airport, La Plata, MD	MD97	1,000
Nyce Airport, Mount Victoria, MD	MD84	1,000
Parks Airpark Airport, Nanjemoy, MD	MD54	1,000
Pilots Cue Airport, Tompkinsville, MD	MD06	1,000
Quantico MCAF, Quantico, VA	NYG	1,000
Stewart Airport, St. Michaels, MD	MD64	1,000
U.S. Naval Weapons Center, Dahlgren Lab Airport, Dahlgren, VA	NDY	1,000

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**SUMMARY:** This final rule establishes a new Special Federal Aviation Regulation (SFAR) that will allow persons to bring a noise-restricted aircraft into the United States under certain conditions without requesting an exemption. The SFAR allows for the issuance of special flight authorizations for one-time flights of noise-restricted aircraft when they are entering the country to be noise retrofitted or sold for scrap. The SFAR is intended to reduce the paperwork burden on both applicants and the FAA, to reduce the processing time for routine actions, to implement certain provisions of the Airport Noise and Capacity Act of 1990, and to restore certain provisions of a similar SFAR that expired December 31, 1991.

**DATES:** Effective June 3, 1993. Comments must be received on or before October 1, 1993.

**ADDRESS:** Send comments on this final rule in triplicate to: Federal Aviation Administration, office of the Chief Counsel, Attn: Rules Docket (AGC-10), Docket No. 27314, 800 Independence Avenue SW., Washington DC. Comments may be inspected in room 915G between 8:30 a.m. and 5 p.m., weekdays, except Federal holidays.

Commenters who wish the FAA to acknowledge the receipt of their comments must submit with their comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 27314 ." The postcard will be date-stamped by the FAA and returned to the commenter.

**FOR FURTHER INFORMATION CONTACT:** Ms. Laurette Fisher, Policy and Regulatory Division (AEE-300), Office of Environment and Energy, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591, telephone (202) 267-3561.

#### **SUPPLEMENTARY INFORMATION:**

##### **Availability of Final Rule**

Any person may obtain a copy of this final rule by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA-230, 800 Independence Avenue, SW., Washington, DC 20591, or be calling (202) 267-3484. Requests should be identified by the docket number of this rule.

Persons interested in being placed on a mailing list for future notices of proposed rulemaking should also request a copy of Advisory Circular No. 11-2, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

##### **Background**

Section 91.805 of the Federal Aviation Regulations (FAR) prohibits any person from operating a civil subsonic turbojet airplane with a maximum weight of more than 75,000 pounds to or from an airport in the United States on or after January 1, 1985, unless that airplane has been shown to comply with Stage 2 or Stage 3 noise levels as contained in 14 CFR part 36. This restriction applies to U.S.-registered aircraft that have standard airworthiness certificates and foreign-registered aircraft that would be required to have a U.S. standard airworthiness certificate in order to conduct the operations intended for the airplane were it registered in the United States.

SFAR 47 (50 FR 7751) was effective on February 26, 1985, and permitted certain operations of noise-restricted aircraft without a formal grant of exemption under 14 CFR part 11. The

to facilitate these operations.

This special flight authorization is available to any US.-owned Stage 2 airplane otherwise prohibited from operating into the contiguous United States by FAR section 91.855.

### **Maintenance Flights**

Special flight authorizations for maintenance flights are obtained from FAA's Flight Standards Division and are not covered by this SFAR. Section 91.857(b) of the recently adopted noise regulations permits an operator of a Stage 2 airplane with a certificated weight of more than 75,000 pounds that was imported into a noncontiguous State, territory, or possession of the United States on or after November 5, 1990, to obtain a special flight authorization to operate that airplane into the contiguous United States for the purpose of maintenance. The maintenance flight must be a nonrevenue or "ferry" flight. Special flight authorizations for maintenance are provided for by section 91.857(b) itself and do not require a separate request under this SFAR.

Notwithstanding the exact language of the regulation, a special flight authorization for maintenance may also be requested under §91.857 for Stage 2 airplanes with a certificated weight of more than 75,000 pounds that were purchased by a U.S. entity after November 5, 1990, but have not been operated into a noncontiguous state or territory.

Airplanes entering the United States for modifications to comply with a Stage 2 or Stage 3 noise level are not considered to be obtaining maintenance. Special flight authorizations for modification flights must be obtained pursuant to section 91.859 or this SFAR.

### **Paperwork Reduction Act**

In accordance with the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*), the reporting requirements associated with this rule are being submitted for approval to the office of Management and Budget (OMB). Upon approval, the FAA will publish the assigned OMB control number in the *Federal Register*.

### **Economic/Regulatory Impact Evaluation**

This SFAR provides an alternative from the exemption process for certain operations, reducing the administrative costs to aircraft operators and to the FAA. While the operations are not without some noise costs, these costs can be characterized as minimal, since the number of operations at any one local airport are anticipated to be both infrequent and extremely low in number.

### **Environmental Analysis**

The procedures implemented by this SFAR have been determined to not significantly affect the quality of the human environment. Pursuant to Department of Transportation "Policies and Procedures for Considering Environmental Impacts" (FAA Order 1050.1D), a Finding of No Significant Impact is being prepared and will be placed in the docket.

### **Federalism Implications**

The regulation herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order



paperwork required to process routine requests as exemptions under 14 CFR part 11.

The FAA stated its intention to replace SFAR 47 in its final rule codifying certain provisions of the Airport Noise and Capacity Act of 1990 (56 FR 48628, September 25, 1991). Section 9309 of the Act (49 U.S.C. App. 2158) includes a provision for allowing otherwise noise-restricted aircraft to enter the United States to obtain modification to meet Stage 3 noise levels. The FAA's experience with this type of action has shown that the most efficient means of granting this permission is by a special flight authorization requested through an SFAR. The only alternative is for an applicant to apply for an exemption under 14 CFR part 11, a process that involves considerably more administrative work for the agency and the petitioner, and the additional time associated with processing that paperwork. Accordingly, the FAA determined that this new SFAR, incorporating the applicable provisions of expired SFAR 47 and the new provisions of the 1990 Act, be developed.

The FAA has determined that prior notice and public comment on this SFAR is unnecessary and contrary to the public interest. The provisions relating to the application for a special flight authorization that were contained in previous SFAR are well known and well regarded by industry. The new SFAR does not change any of the familiar procedures; it expands the applicability of the previous SFAR to include those aircraft affected by the 1990 Act, and to facilitate the movement of airplanes necessitated by the transition to an all Stage 3 fleet, also required by the 1990 Act.

Although this SFAR is being adopted without prior notice and public comment, interested persons may submit comments in triplicate to the address listed under the "ADDRESSES" caption above. All comments will be available for examination in the Rules Docket. This SFAR may be amended in response to such comments.

### **Conclusion**

For the reasons stated above, I certify that this amendment: (1) is not a major rule under Executive Order 12291; (2) is considered a significant rule, but does not require a Regulatory Evaluation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. In addition, this SFAR will have little or no impact on trade opportunities for U.S. firms doing business overseas, or for foreign firms doing business in the United States, since all affected operators are treated equally by this regulation.

### **The Final Rule**

Accordingly, the FAA amends 14 CFR part 91 of the Federal Aviation Regulations effective June 3, 1993.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. App. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, 2121 through 2125, 2157 and 2158; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et. seq.*; E.O. 11514; 49 U.S.C. 106(g).

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(b) A copy of the authorization is carried aboard the airplane during all operations to or from a U.S. airport;

(c) The airplane carries an appropriate airworthiness certificate issued by the country of registration and meets the registration and identification requirements of that country; and

(d) Whenever the application is for operation to a location at which FAA-approved noise abatement retrofit equipment is to be installed to make the aircraft comply with Stage 2 or Stage 3 noise levels as defined in part 36 of this chapter, the applicant must have a valid contract for such equipment.

**[2.]** Authorization for the operation of a Stage 1 or Stage 2 civil turbojet airplane to or from a U.S. airport may be issued by the FAA for the following purposes:

#### **Stage 1 Airplanes**

(a) For a Stage 1 airplane owned by a U.S. owner/applicant on and since November 4, 1990:

(i) obtaining modifications necessary to meet Stage 2 noise levels as defined in part 36 of this chapter;

(ii) obtaining modifications necessary to meet Stage 3 noise levels as defined in part 36 of this chapter;

(iii) Scrapping the airplane, as deemed necessary by the FAA, to obtain spare parts to support U.S. programs for the national defense or safety.

(b) For a Stage 1 airplane owned by a non-U.S. owner/applicant:

(i) obtaining modifications necessary to meet Stage 2 noise levels as defined in part 36 of this chapter;

(ii) obtaining modifications necessary to meet Stage 3 noise levels as defined in part 36 of this chapter; or

(iii) Scrapping the airplane, as deemed necessary by the FAA, to obtain spare parts to support U.S. programs for the national defense or safety.

(c) For a Stage 1 airplane purchased by a U.S. owner/applicant on or after November 5, 1990:

(i) obtaining modifications necessary to meet Stage 2 noise levels as defined in part 36 of this chapter, provided that the airplane does not subsequently operate in the contiguous United States;

(ii) obtaining modifications necessary to meet Stage 3 noise levels as defined in part 36 of this chapter; or

(iii) Scrapping the airplane, as deemed necessary by the FAA, to obtain spare parts to support U.S. programs for the national defense or safety.

#### **Stage 2 Airplanes**

(d) For a Stage 2 airplane purchased by a U.S. owner/applicant on or after November 5, 1990, obtaining modification to meet Stage 3 noise levels as defined in part 36 of this chapter.

airplane, or  
(iii) Prior to January 1, 2000, operating the airplane as deemed necessary by the FAA for the sale, lease, storage, or scrapping of the airplane.

**【3.】** An application for a special flight authorization under this Special Federal Aviation Regulation shall be submitted to the FAA, Director of the Office of Environment and Energy, received no less than five days prior to the requested flight, and include the following:

- (a) The applicant's name and telephone number;
- (b) The name of the airplane operator;
- (c) The make, model, registration number, and serial number of the airplane;
- (d) The reason why such authorization is necessary;
- (e) The purpose of the flight;
- (f) Each U.S. airport at which the flight will be operated and the number of takeoffs and landings at each;
- (g) The approximate dates of the flights;
- (h) The number of people on board the airplane and the function of each person;
- (i) Whether a special flight permit under FAR part 21.199 or a special flight authorization under FAR part 91.715 is required for the flight;
- (j) A copy of the contract for noise abatement retrofit equipment, if appropriate; and
- (k) Any other information or documentation requested by the Director, Office of Environment and Energy, as necessary to determine whether the application should be approved.

**【4.】** The Special Federal Aviation Regulation terminates on December 31, 1999, unless sooner rescinded or superseded.

**SUMMARY:** This final rule replaces the flight prohibition implemented by the FAA in SFAR 65, which became effective on April 20, 1992, and expired on April 16, 1993. This action prohibits the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight to or from the territory of Libya. This action further prohibits the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flight's origin or ultimate destination is Libya. Exceptions are made for particular flights approved by the United States Government in consultation with the UN Security Council committee established under Security Council Resolution 748 (1992) and for certain emergency operations. This action is necessary to implement Executive Orders 12543 (1986) and 12801 (1992) and Resolution 748 mandating an embargo of air traffic with Libya.

**DATES:** The removal of SFAR 65 and the addition of SFAR 65-1 are effective on September 20, 1995. SFAR 65-1 shall remain in effect until further notice.

**FOR FURTHER INFORMATION CONTACT:** Mark W. Bury, International Affairs and Legal Policy Staff (AGC-7), Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone (202) 267-3515.

#### **SUPPLEMENTARY INFORMATION:**

##### **Availability of Document**

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Public Inquiry Center (APA-230), 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the number of this SFAR. Persons interested in being placed on a mailing list for future rules should also request a copy of the Advisory Circular No. 11-2A, which describes the application procedure.

##### **Background**

The Federal Aviation Administration (FAA) is responsible for the safety of flight in the United States and the safety of U.S.-registered aircraft and U.S. operators throughout the world. Section 40101(d)(1) of Title 49, United States Code, requires the Administrator of the FAA to consider the regulation of air commerce in a manner that best promotes safety and fulfills the requirements of national security as being in the public interest. In addition, 49 U.S.C. 40105(b)(1)(A) requires the Administrator to exercise his authority consistently with the obligations of the United States Government under an international agreement.

One such international agreement is the Charter of the United Nations (the Charter) (59 Stat. 1031; 3 Bevans 1153 (1945)). Under Article 25 of the Charter, "the members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter." Article 48(1) of the Charter further provides, in pertinent part, that "[t]he action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all members of the United Nations . . . ."

On March 31, 1992, acting under Chapter VII of the Charter, the Security Council adopted Resolution 748, mandating an embargo of certain air traffic with Libya. Paragraph 4(a) of Resolution 748 requires all states to deny permission to any aircraft to take off from, land in, or overfly their territory if the aircraft is destined to land in or has taken off from the

from Libya . . . or the sale in the United States by any person holding authority under the Federal Aviation Act of any transportation by air which includes any stop in Libya." On January 30, 1986, the Secretary of Transportation implemented Executive Order 12543 by issuing Order 86-2-23, which amended all Department of Transportation (DOT) certificates issued under section 401 of the Federal Aviation Act, all permits issued under section 402 of the Act, and all exemptions from sections 401 and 402 accordingly.

In response to UN Resolution 748, the President issued Executive Order 12801 on April 15, 1992. Section 1 of Executive order 12801 prohibits:

the granting of permission to any aircraft to take off from, land in, or overfly the United States, if the aircraft, as part of the same flight or a continuation of that flight, is destined to land in or has taken off from the territory of Libya . . . .

Executive Order 12801 cited the President's authority under the International Emergency Economic Powers Act (50 U.S.C. 1701 *et seq.*), the National Emergencies Act (50 U.S.C. 1601 *et seq.*), section 1114 of the Federal Aviation Act of 1958, as amended (formerly codified at 49 U.S.C. app. 1514, now recodified at 49 U.S.C. 40106), section 301 of Title 3, United States Code (3 U.S.C. 301), and section 5 of the United Nations Participation Act of 1945, as amended (22 U.S.C. 287c). In particular, the United Nations Participation Act provides that:

Notwithstanding the provisions of any other law, whenever the United States is called upon by the (UN) Security Council to apply measures which said Council has decided . . . are to be employed to give effect to its decisions under the (United Nations) Charter, the President may, to the extent necessary to apply such measures, through any agency which he may designate, and under such orders, rules, or regulations as may be prescribed by him, investigate, regulate, or prohibit, in whole or in part, economic relations of rail, sea, [and] air . . . between any foreign country or any national thereof or any person therein and the United States or any person subject to the jurisdiction thereof . . . .

In support of Executive Order 12801, the FAA adopted SFAR 65 on April 16, 1992. SFAR 65 prohibited the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight to or from the territory of the Libya. SFAR 65 also prohibited the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flight is destined to land in or take off from the Libya. SFAR 65 expired on April 16, 1993.

Copies of UN Security Council Resolution 748, Executive Orders 12543 and 12801, and DOT Order 86-2-23, all of which remain in effect, have been placed in the docket for this rulemaking.

### **Prohibition Against Certain Flights Between the United States and Libya**

On the basis of the above, and in support of the Executive Order of the President of the United States, I find that immediate action by the FAA is required to implement Executive Orders 12543 and 12801 and to meet the obligations of the United States under international law as evidenced by U.N. Security Council Resolution No. 748. Accordingly, I am ordering a prohibition on the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight that has Libya as its origin or ultimate destination. Operations approved by the United States Government in consultation with the UN Security Council committee established under Resolution 748 and certain emergency operations shall be excepted from this prohibition. For the reasons stated above, I also find that notice and public comment under 5 U.S.C. 553(b) are impracticable and contrary to the public interest. Further, I find

The potential cost of this regulation is limited to the net revenue of commercial flights between the United States and Libya. However, revenue flights to Libya are currently prohibited by DOT Order 86-2-23. Accordingly, this action will impose no additional burden on those operators.

### **Paperwork Reduction Act**

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

### **International Trade Impact Assessment**

DOT Order 86-2-23 prohibits U.S. and foreign air carriers from engaging in the sale of air transportation to or from Libya. This SFAR does not impose any restrictions on commercial carriers beyond those imposed by the DOT Order. Therefore, the SFAR will not create a competitive advantage or disadvantage for foreign companies in the sale of aviation products or services in the United States, nor for domestic firms in the sale of aviation products or services in foreign countries.

### **Federalism Determination**

The amendment set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612 (52 FR 4168; October 30, 1987), it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons set forth above, the FAA has determined that this action is not a "significant regulatory action" under Executive Order 12866. This action is not considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Because revenue flights to Libya are already prohibited by DOT Order 86-2-23, the FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **The Amendment**

For the reasons set forth above, the Federal Aviation Administration is amending 14 CFR part 91 effective September 20, 1995.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. app. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et seq.*; E.O. 11514, 35 FR 4247, 3 CFR, 1966-1970 Comp., p. 902; 49 U.S.C. 106(g).

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(a) No person shall operate an aircraft on a flight to any point in Libya, or to any intermediate point on a flight where the ultimate destination is any point in Libya or that includes a landing at any point in Libya in its intended itinerary, from any point in the United States;

(b) No person shall operate an aircraft on a flight to any point in the United States from any point in Libya, or from any intermediate point on a flight where the origin is in Libya, or from any point on a flight which includes a departure from any point in Libya in its intended itinerary; or

(c) No person shall operate an aircraft over the territory of the United States if that aircraft's flight itinerary includes any landing at or departure from any point in Libya.

【3. *Permitted operations.* This SFAR shall not prohibit the flight operations between the United States and Libya described in section 2 of this SFAR by an aircraft authorized to conduct such operations by the United States Government in consultation with the committee established by UN Security Council Resolution 748 (1992), as affirmed by UN Security Council Resolution 883 (1993).

【4. *Emergency situations.* In an emergency that requires immediate decision and action for the safety of the flight, the pilot in command of an aircraft may deviate from this SFAR to the extent required by that emergency. Except for U.S. air carriers and commercial operators that are subject to the requirements of 14 CFR 121.557, 121.559, or 135.19, each person who deviates from this rule shall, within ten (10) days of the deviation, excluding Saturdays, Sundays, and Federal holidays, submit to the nearest FAA Flight Standards District Office a complete report of the operations or the aircraft involved in the deviation, including a description of the deviation and the reasons therefor.

【5. *Duration.* This SFAR No. 65-1 shall remain in effect until further notice.】

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**SUMMARY:** This action complies with the Order of the President of the United States to prohibit the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight to or from the territory of the Federal Republic of Yugoslavia (Serbia and Montenegro) hereinafter "Yugoslavia." This action also prohibits the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flight is destined to land in or take off from Yugoslavia. This action is taken to prevent an undue hazard to the aircraft that would be engaged in such a flight, as well as to persons involved in the flight, arising from international adherence to or enforcement of UN Security Council Resolution 757 (1992) mandating, *inter alia*, an embargo of most air traffic with Yugoslavia. Issuance of this rule implements and is fully consistent with UN Security Council Resolution 757.

**DATES:** *Effective Date:* June 19, 1992. *Expiration Date:* June 19, 1993.

**FOR FURTHER INFORMATION CONTACT:** Patricia R. Lane, Office of the Chief Counsel, AGC-230, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone (202) 267-3491.

#### **SUPPLEMENTARY INFORMATION:**

##### **Availability of Document**

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center, APA-230, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the number of this SFAR. Persons interested in being placed on a mailing list for future rules should also request a copy of Advisory Circular No. 11-2A, which describes the application procedure.

##### **Background**

The Federal Aviation Administration (FAA) is responsible for the safety of flight in the United States and the safety of U.S.-registered aircraft throughout the world. Under section 103 of the Federal Aviation Act of 1958 (Act), as amended, the FAA is charged with the regulation of air commerce in a manner that best promotes safety and fulfills the requirements of national security. In addition, section 1102(a) of the Act requires that the FAA Administrator exercise his authority consistently with any treaty obligations of the United States. The United States is a party to the Charter of the United Nations (Charter) (59 Stat. 1031; 3 Bevans 1153 (1945)). Articles 25 and 48 of that Charter require that Members of the United Nations carry out the decisions of the Security Council. Article 25 states: "[t]he Members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter." Additionally, Article 48(1) states, in pertinent part: "[t]he action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all members of the United Nations. . . ."

On May 30, 1992, acting under Chapter VII of the UN Charter, the Security Council adopted Resolution 757, mandating an embargo of certain air traffic with Yugoslavia. Paragraph 7(a) of Resolution 757 requires all states to deny permission to any aircraft to take off from, land in, or overfly their territory if the aircraft is destined to land in or has taken off from Yugoslavian territory. An exception is made for flights that have been approved on the grounds

primary and alternate landing points within the fuel range of the aircraft. There is substantial risk, therefore, that such a flight could not be conducted safely.

The United States Government has taken several earlier actions to restrict air transportation between the United States and Yugoslavia. On June 5, 1992, the President issued Executive Order 12810, which prohibits "[a]ny transaction by a United States person, or involving the use of U.S.-registered vessels and aircraft, relating to transportation to or from the Federal Republic of Yugoslavia (Serbia and Montenegro) . . . or the sale in the United States by any person holding authority under the Federal Aviation Act . . . of any transportation by air which includes any stop in the Federal Republic of Yugoslavia (Serbia and Montenegro)." The Executive Order also prohibits:

The granting of permission to any aircraft to take off from, land in, or overfly the United States, if the aircraft, as part of the same flight or a continuation of that flight, is destined to land in or has taken off from the territory of the Federal Republic of Yugoslavia (Serbia and Montenegro).

Executive Order 12810 cited the President's authority under the International Emergency Economic Powers Act (50 U.S.C. § 1701 *et seq.*), the National Emergencies Act (50 U.S.C. § 1601 *et seq.*), section 1114 of the Federal Aviation Act of 1958, as amended (49 U.S.C. App. § 1514), section 301 of the United States Code (3 U.S.C. § 301), and section 5 of the United Nations Participation Act of 1945, as amended (22 U.S.C. § 287(c)). This last Act provides that:

Notwithstanding the provisions of any other law, whenever the United States is called upon by the [UN] Security Council to apply measures which said Council has decided . . . to be employed to give effect to its decisions under [the United Nations] Charter, the President may, to the extent necessary to apply such measures, through any agency which he may designate, and under such orders, rules, or regulations as may be prescribed by him, investigate, regulate, or prohibit, in whole or in part, economic relations of rail, sea, [and] air . . . between any foreign country or to any national thereof or any person therein and the United States or any person subject to the jurisdiction thereof. . . .

On June 12, 1992, the Office of the Secretary of Transportation issued Order 92-6-27, which implements Executive Order 12810 by amending all Department of Transportation (DOT) certificates issued under section 401 of the Act, all permits issued under section 402 of the Act, and all exemptions from section 401 and 402 accordingly.

Copies of the May 30 UN Security Council Resolution, Executive Order 12810, and DOT Order 92-6-27 have been placed in the docket for this rulemaking.

#### **Temporary Restrictions on Flights Between the United States and Yugoslavia**

On the basis of the above, and in support of the Executive Order of the President of the United States, I find that immediate action by the FAA is required to implement the Executive Order. Furthermore, after consultation with the Department of State, I find that the current circumstances, including the closure of airspace and landing sites in countries situated between the United States and Yugoslavia to aircraft destined to land in, or having taken off from, Yugoslavia, represent a hazard to any aircraft used for that purpose as well as to persons onboard that aircraft. Accordingly, these circumstances further warrant immediate action by the FAA to maintain the safety of flight and meet obligations under international law. For these reasons, I also find that notice and public comment under 5 U.S.C. § 553(b) are impracticable and contrary to the public interest. Further, I find that good cause exists

The potential cost of this regulation is limited to the net revenue of commercial flights between the United States and Yugoslavia and the cost of having to circumnavigate the territory by U.S.-registered private aircraft. Revenue flights to Yugoslavia are currently prohibited by DOT Order 92-6-27, and the FAA is unaware of any U.S.-registered private aircraft currently operating over Yugoslavia. Accordingly, this action will impose no additional burden on commercial or private operators.

Benefits in the form of potential prevention of injury to persons and damage to property are not quantifiable and most likely would occur outside the United States. For these reasons, the costs and benefits of the regulation considered under DOT Regulatory Policies and Procedures are minimal, and a further regulatory evaluation will not be conducted.

#### **Paperwork Reduction Act**

In accordance with the Paperwork Reduction Act of 1980 (Pub. L. 96-511), there are no requirements for information collection associated with this rule.

#### **International Trade Impact Assessment**

DOT Order 92-6-27 prohibits U.S. and foreign air carriers from engaging in the sale of air transportation to or from Yugoslavia. This SFAR does not impose any restrictions on commercial carriers beyond those imposed by the DOT Order. Therefore, the SFAR will not create a competitive advantage or disadvantage for foreign companies in the sale of aviation products or services in the United States, nor for domestic firms in the sale of aviation products or services in foreign countries.

#### **Federalism Determination**

The amendment set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

#### **Conclusion**

For the reasons set forth above, the FAA has determined that this action is not a "major rule" under Executive Order 12291. This action is considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Because revenue flights to Yugoslavia are already prohibited by DOT Order 92-6-27, the FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **The Amendment**

For the reasons set forth above, the Federal Aviation Administration is amending 14 CFR part 91 effective June 15, 1992.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. app. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et seq.*; E.O. 11514, 35 FR 4247, 3 CFR, 1966-1970 Comp., p. 902; 49 U.S.C. 106(g).

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**SUMMARY:** On June 23, 1992, the FAA published a prohibition against certain flights between the United States and the Federal Republic of Yugoslavia (Serbia and Montenegro; hereinafter "Yugoslavia") (57 FR 28031). That prohibition expired June 19, 1993. This action reinstates that prohibition.

**DATES:** *Effective date:* August 26, 1993. *Expiration date:* August 26, 1994.

**FOR FURTHER INFORMATION CONTACT:** Patricia R. Lane, Office of the Chief Counsel, AGC-230, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20593; telephone (202) 267-3491.

## **SUPPLEMENTARY INFORMATION:**

### **Availability of Document**

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center, APA-230, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the number of this SFAR. Persons interested in being placed on a mailing list for future rules should also request a copy of Advisory Circular No. 11-2A, which describes the application procedure.

### **Background**

The Federal Aviation Administration (FAA) is responsible for the safety of flight in the United States and the safety of U.S.-registered aircraft throughout the world. Under Section 103 of the Federal Aviation Act of 1958 (Act) as amended, the FAA is charged with the regulation of air commerce in a manner that best promotes safety and fulfills the requirements of national security. In addition, Section 1102(a) of the Act requires the FAA Administrator to exercise authority consistently with any treaty obligations of the United States. The United States is a party to the Charter of the United Nations (Charter) (59 Stat. 1031; 3 Bevans 1153 (1945)). Articles 25 and 48 of that Charter require Members of the United Nations to carry out the decisions of the Security Council. Article 25 states, "[t]he Members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter." Additionally, Article 48(1) states, in pertinent part, "[t]he action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all members of the United Nations . . . ."

On May 30, 1992, acting under Chapter VII of the UN Charter, the Security Council adopted Resolution 757, mandating an embargo of certain air traffic with Yugoslavia. Paragraph 7(a) of Resolution 757 requires all states to deny permission to any aircraft to take off from, land in, or overfly their territory if the aircraft is destined to land in or has taken off from Yugoslavian territory. An exception is made for flights that have been approved on the grounds of urgent humanitarian need by a special Security Council committee established by paragraph 13 of the Resolution.

The United States Government fully expects member states of the UN to comply with UN Security Council Resolution 757. Such action would have the effect of denying overflight rights to aircraft travelling to or from Yugoslavian territory. As a result, the FAA believes that a flight from the United States to Yugoslavia during the effective period of Resolution 757 could not be planned with assurances that the aircraft would have safe primary and alternate

air which includes any stop in the Federal Republic of Yugoslavia (Serbia and Montenegro).”  
The Executive Order also prohibits:

the granting of permission to any aircraft to take off from, land in, or overfly the United States, if the aircraft, as part of the same flight or a continuation of that flight, is destined to land in or has taken off from the territory of the Federal Republic of Yugoslavia (Serbia and Montenegro).

Executive Order 12810 cited the President’s authority under the International Emergency Economic Powers Act (50 U.S.C. § 1701 *et seq.*), the National Emergencies Act (50 U.S.C. § 1601 *et seq.*), Section 1114 of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. § 1514), Section 301 of the United States Code (3 U.S.C. § 301), and Section 5 of the United Nations Participation Act of 1945, as amended (22 U.S.C. § 287(c)). This last Act provides that:

Notwithstanding the provisions of any other law, whenever the United States is called upon by the [UN] Security Council to apply measures which said Council has decided to be employed to give effect to its decisions under [the United Nations] Charter, the President may, to the extent necessary to apply such measures, through any agency which he may designate, and under such orders, rules, or regulations as may be prescribed by him, investigate, regulate, or prohibit, in whole or in part, economic relations of rail, sea, [and] air . . . between any foreign country or to any national thereof or any person therein and the United States or any person subject to the jurisdiction thereof. . . .

On June 12, 1992, the Office of the Secretary of Transportation issued Order 92-6-27, which implements Executive Order 12810 by amending all Department of Transportation (DOT) certificates issued under Section 401 of the Act, all permits issued under Section 402 of the Act, and all exemptions from Section 401 and 402 accordingly.

The May 30 UN Security Council Resolution, Executive Order 12810, and DOT Order 92-6-27 remain in effect, and copies have been placed in the docket for this rulemaking.

#### **Temporary Restrictions on Flights Between the United States and Yugoslavia**

On the basis of the above, and in support of the Executive Order of the President of the United States, I find that action by the FAA is required to reinstate the prohibition that expired June 19, 1993. Furthermore, after consultation with the Department of State, I find that the current circumstances, including the closure of airspace and landing sites in countries situated between the United States and Yugoslavia to aircraft destined to land in, or having taken off from, Yugoslavia, represent a hazard to any aircraft used for that purpose as well as to persons onboard that aircraft. Accordingly, these circumstances further warrant action by the FAA to maintain the safety of flight and meet obligations under international law. For these reasons, I also find that notice and public comment under 5 U.S.C. § 553(b) are impracticable and contrary to the public interest. Further, I find that good cause exists for making this rule effective immediately upon issuance. I also find that this action is fully consistent with my obligations under Section 1102(a) of the Act to ensure that I exercise my duties consistently with the obligations of the United States under international agreements.

The rule contains an expiration date of August 26, 1994, but may be terminated sooner or further extended if circumstances so warrant.

Benefits in the form of potential prevention of injury to persons and damage to property are not quantifiable and most likely would occur outside the United States. For these reasons, the costs and benefits of the regulation considered under DOT Regulatory Policies and Procedures are minimal, and a further regulatory evaluation will not be conducted.

### **Paperwork Reduction Act**

There are no requirements for information collection associated with this rule that require approval from the Office of Management and Budget pursuant to the Paperwork Reduction Act of 1980 (Pub. L. 96-511).

### **International Trade Impact Assessment**

DOT Order 92-6-27 prohibits U.S. and foreign air carriers from engaging in the sale of air transportation to or from Yugoslavia. This SFAR does not impose any restrictions on commercial carriers beyond those imposed by the DOT Order. Therefore, the SFAR will not create a competitive advantage or disadvantage for foreign companies in the sale of aviation products or services in the United States, nor for domestic firms in the sale of aviation products or services in foreign countries.

### **Federalism Determination**

The amendment set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons set forth above, the FAA has determined that this action is not a "major rule" under Executive Order 12291. This action is considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034 February 26, 1979). Because revenue flights to Yugoslavia are already prohibited by DOT Order 92-6-27, the FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **The Amendment**

For the reasons set forth above, the Federal Aviation Administration is amending 14 CFR part 91 effective August 26, 1993.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. app. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et seq.*; E.O. 11514, 35 FR4247, 3 CFR, 1966-1970 Comp., p. 902; 49 U.S.C. 106(g).



**SUMMARY:** This final rule replaces the flight prohibition implemented by the FAA in SFAR 66-1, which was made effective on August 26, 1993, and expired on August 26, 1994. This action prohibits the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight to or from the territory of Federal Republic of Yugoslavia (Serbia and Montenegro). This action further prohibits the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flight's origin or ultimate destination is Serbia and Montenegro. Exceptions are made for particular flights approved by the United States Government and for certain emergency operations. This action is necessary to implement Executive Order 12810 (1992) and UN Security Council Resolution 757 (1992) mandating an embargo of air traffic with Serbia and Montenegro.

**DATES:** *Effective date:* May 31, 1995. *Expiration date:* June 2, 1997.

**FOR FURTHER INFORMATION CONTACT:** Mark W. Bury, International Affairs and Legal Policy Staff (AGC-7), Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3515.

#### **SUPPLEMENTARY INFORMATION:**

##### **Availability of Document**

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Public Inquiry Center (APA-230), 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the number of this SFAR. Persons interested in being placed on a mailing list for future rules should also request a copy of the Advisory Circular No. 11-2A, which describes the application procedure.

##### **Background**

The FAA is responsible for the safety of flight in the United States and the safety of U.S.-registered aircraft and U.S. operators throughout the world. Section 40101(d)(1) of Title 49, United States Code, requires the Administrator of the FAA to consider the regulation of air commerce in a manner that best promotes safety and fulfills the requirements of national security as being in the public interest. In addition, 49 U.S.C. 40105(b)(A) requires the Administrator to exercise his authority consistently with the obligations of the United States Government under an international agreement.

One such international agreement is the Charter of the United Nations (the Charter) (59 Stat. 1031; 3 Bevans 1153 (1945)). Under Article 25 of the Charter, "the members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter." Article 48(1) of the Charter further provides, in pertinent part, that "[t]he action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all members of the United Nations. . . ."

On May 30, 1992, acting under Chapter VII of the Charter, the Security Council adopted Resolution 757, mandating an embargo of certain air traffic with Serbia and Montenegro. Paragraph 7(a) of Resolution 757 requires all states to deny permission to any aircraft to take off from, land in, or overfly their territory if the aircraft is destined to land in or has taken

and aircraft, relating to transportation to or from the Federal Republic of Yugoslavia (Serbia and Montenegro) . . . or the sale in the United States by any person holding authority under the Federal Aviation Act . . . of any transportation by air which includes any stop in the Federal Republic of Yugoslavia (Serbia and Montenegro).” Section 2(e) of the Executive Order further prohibits:

The granting of permission to any aircraft to take off from, land in, or overfly the United States, if the aircraft, as part of the same flight or a continuation of that flight, is destined to land in or has taken off from the territory of the Federal Republic of Yugoslavia (Serbia and Montenegro).

Executive Order 12810 cites the President’s authority under the International Emergency Economic Powers Act (50 U.S.C. 1701 *et seq.*), the National Emergencies Act (50 U.S.C. 1601 *et seq.*), Section 1114 of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. 1514), Section 301 of Title 3, United States Code (3 U.S.C. 301), and Section 5 of the United Nations Participation Act of 1945, as amended (22 U.S.C. 287(c)). In particular, the United Nations Participation Act provides that:

Notwithstanding the provisions of any other law, whenever the United States is called upon by the [UN] Security Council to apply measures which said Council has decided . . . to be employed to give effect to its decisions under the [United Nations] Charter, the President may, to the extent necessary to apply such measures, through any agency which he may designate, and under such orders, rules, or regulations as may be prescribed by him, investigate, regulate, and prohibit, in whole or in part, economic relations of rail, sea, [and] air . . . between any foreign country or to any nation thereof or any person therein and the United States or any person subject to the jurisdiction thereof. . . .

On June 12, 1992, the Office of the Secretary of Transportation issued Order 92-6-27, which implements Executive Order 12810 by amending all Department of Transportation (DOT) certificates issued under Section 401 of the Act, all permits issued under Section 402 of the Act, and all exemptions from Section 401 and 402 accordingly.

On June 23, 1992, the FAA published SFAR 66, prohibiting the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight to or from the territory of the Serbia and Montenegro (57 FR 28031). SFAR 66 also prohibited the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flight is destined to land in or take off from the Serbia and Montenegro. After SFAR 66 expired on June 19, 1993, the FAA reinstated the prohibition against certain flights between the United States and the Serbia and Montenegro through the issuance of SFAR 66-1 (58 FR 45220). SFAR No. 66-1 became effective on August 26, 1993, and expired on August 26, 1994.

Copies of Resolution 757 of the United Nations Security Council, Executive Order 12810, and DOT Order 92-6-27, all of which remain in effect, have been placed in the docket for this rulemaking.

#### **Prohibition Against Certain Flights Between the United States, Serbia and Montenegro**

On the basis of the above, and in support of the Executive Order of the President of the United States, I find that immediate action by the FAA is required to implement Executive Order 12810 and to meet the obligations of the United States under international law as evidenced by U.N. Security Council Resolution No. 757. Accordingly, I am ordering a prohibition on the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight that has Serbia and Montenegro as its origin or ultimate destination. Operations

The rule contains an expiration date of June 2, 1997 but may be terminated sooner or extended through the publication of a corresponding notice if circumstances so warrant.

### **Regulatory Evaluation**

The potential cost of this regulation is limited to the net revenue of commercial flights between the United States, Serbia and Montenegro and the cost of having to circumnavigate the territory by U.S.-registered aircraft. Revenue flights to Serbia and Montenegro are currently prohibited by DOT Order 92-6-27, and the FAA is unaware of any U.S.-registered private aircraft currently operating over Serbia and Montenegro. Accordingly, this action will impose no additional burden on commercial or private operators.

### **Paperwork Reduction Act**

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

### **International Trade Impact Assessment**

DOT Order 92-6-27 prohibits U.S. and foreign air carriers from engaging in the sale of air transportation to or from Serbia and Montenegro. This SFAR does not impose any restrictions on commercial carriers beyond those imposed by the DOT Order. Therefore, the SFAR will not create a competitive advantage or disadvantage for foreign companies in the sale of aviation products or services in the United States, nor for domestic firms in the sale of aviation products or services in foreign countries.

### **Federalism Determination**

The amendment set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612 (52 FR 4168; October 30, 1987), it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons set forth above, the FAA has determined that this action is not a "significant regulatory action" under Executive Order 12866. This action is considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Because revenue flights to Serbia and Montenegro are already prohibited by DOT Order 92-6-27, the FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **The Amendment**

For the reasons set forth above, the Federal Aviation Administration is amending 14 CFR part 91 effective May 31, 1995.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. app. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et seq.*; E.O. 11514, 35 FR 4247, 3 CFR, 1966-1970 Comp., p. 902; 49 U.S.C. 106(g).

**SUMMARY:** This action suspends indefinitely the provisions of SFAR No. 66-2. SFAR No. 66-2 prohibits, with certain exceptions, the takeoff from, landing in, or overflight of the territory of the United States by any aircraft on a flight to or from the territory of Federal Republic of Yugoslavia (Serbia and Montenegro). In addition, the SFAR prohibits the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flight's origin or ultimate destination is Serbia and Montenegro. Presidential Determination No. 96-7 suspends the sanctions previously imposed under Executive Order 12810 with respect to Yugoslavia to achieve a negotiated settlement of the conflict in Bosnia-Herzegovina and directs the Department of Transportation to suspend the effectiveness of Order No. 92-6-27. Accordingly, the Administrator is suspending indefinitely the effectiveness of the provisions of SFAR No. 66-2.

**DATES:** Effective on January 2, 1996. SFAR No. 66-2 in 14 CFR part 91 is suspended indefinitely.

**FOR FURTHER INFORMATION CONTACT:** Patricia R. Lane, Airspace and Air Traffic Law Branch (AGC-230), Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3491.

#### **SUPPLEMENTARY INFORMATION:**

##### **Availability of Document**

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Public Inquiry Center (APA-230), 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the number of this SFAR. Persons interested in being placed on a mailing list for future rules should also request a copy of the Advisory Circular No. 11-2A, which describes the applications procedure.

##### **Background**

The FAA is responsible for the safety of flight in the United States and the safety of U.S.-registered aircraft and U.S. operators throughout the world. Section 40101(d)(1) of Title 49, United States Code, requires the Administrator of the FAA to consider the regulation of air commerce in a manner that best promotes safety and fulfills the requirements of national security as being in the public interest. In addition, 49 U.S.C. 40105(b)(A) requires the Administrator to exercise his authority consistently with the obligations of the United States Government under an international agreement.

One such international agreement is the Charter of the United Nations (the Charter) (59 Stat. 1031; 3 Bevans 1153 (1945)). Under Article 25 of the Charter, "the members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter." Article 48(1) of the Charter further provides, in pertinent part, that "[t]he action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all members of the United Nations . . ."

On May 30, 1992, acting under Chapter VII of the charter, the Security Council adopted Resolution 757, mandating an embargo of certain air traffic with Serbia and Montenegro. Paragraph 7(a) of Resolution 757 requires all states to deny permission to any aircraft to takeoff

... transaction by a United States person, or involving the use of U.S. registered vessels and aircraft, relating to transportation to or from the Federal Republic of Yugoslavia (Serbia and Montenegro) . . . or the sale in the United States by any person holding authority under the Federal Aviation Act . . . of any transportation by air which includes any stop in the Federal Republic of Yugoslavia (Serbia and Montenegro).” Section 2(e) of the Executive Order further prohibits:

The granting of permission to any aircraft to takeoff from, land in, or overfly the United States, if the aircraft, as part of the same flight or a continuation of that flight, is destined to land in or has taken off from the territory of the Federal Republic of Yugoslavia (Serbia and Montenegro).

Executive Order 12810 cites the Presidents’ authority under the International Emergency Economic Powers Act (50 U.S.C. 1701 *et seq.*), the National Emergencies Act (50 U.S.C. 1601 *et seq.*), Section 1114 of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. 1514), Section 301 of Title 3, United States Code (3 U.S.C. 301), and Section 5 of the United Nations Participation Act of 1945, as amended (22 U.S.C. 287(c)). In particular, the United Nations Participation Act provides that:

[N]otwithstanding the provisions of any other law, whenever the United States is called upon by the [UN] Security Council to apply measures which said Council has decided . . . to be employed to give effect to its decisions under the [United Nations] Charter, the president may, to the extent necessary to apply such measures, through any agency which he may designate, and under such orders, rules, or regulations as may be prescribed by him, investigate, regulate, or prohibit in whole or in part, economic relations of rail, sea, [and] air . . . between any foreign country or to any nation thereof or any person therein and the United States or any person subject to the jurisdiction thereof . . .

On June 12, 1992, the Office of the Secretary of Transportation issued Order 92-6-27, which implements Executive Order 12810 by amending all Department of Transportation (DOT) certificates issued under Section 401 of the Act, all permits issued under Section 402 of the Act, and all exemptions from Section 401 and 402 accordingly.

On June 23, 1992, the FAA published SFAR No. 66, prohibiting the takeoff from, landing in, or overflights of the territory of the United States by an aircraft on a flight to or from the territory of the Serbia and Montenegro (57 FR 28031). SFAR No. 66 also prohibited the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flight is destined to land in or takeoff from Serbia and Montenegro. After SFAR No. 66 expired on June 19, 1993, the FAA reinstated the prohibition against certain flights between the United States and the Serbia and Montenegro through the issuance of SFAR No. 66-1 (58 FR 45220). SFAR No. 66-1 became effective on August 26, 1993, and expired on August 26, 1994.

On May 31, 1995, the FAA replaced SFAR No. 66-1 with SFAR No. 66-2. SFAR No. 66-2 prohibits, with certain exceptions, the takeoff from, landing in, or overflight of the territory of the United States by an aircraft on a flight to or from the territory of Federal Republic of Yugoslavia (Serbia and Montenegro) (60 FR 28476). In addition, SFAR No. 66-2 prohibits the landing in, takeoff from, or overflight of the territory of the United States by any aircraft on a flight from or to any intermediate destination, if the flights’ origin or ultimate destination is Serbia and Montenegro. SFAR No. 66-2 expires on June 2, 1997.

On October 27, 1995, the Embassy of the Federal Republic of Yugoslavia petitioned the FAA for an exemption from SFAR No. 66-2 to permit the operation of an aircraft carrying

suspends the sanctions previously imposed with respect to Yugoslavia to the U.S. Congress. The President determined that suspension was necessary to achieve a negotiated settlement of the conflict in Bosnia-Herzegovina that is acceptable to the parties. On January 2, 1996, the Department of Transportation suspended the effectiveness of the conditions contained in Order No. 92-6-27. A copy of Presidential Determination No. 96-7 has been placed in the docket for this action.

### **Indefinite Suspension of the Prohibition Against Certain Flights Between the United States and the Federal Republic of Yugoslavia (Serbia and Montenegro)**

On the basis of the above, and in support of Presidential Determination No. 96-7, I am ordering an indefinite suspension of the provisions of SFAR No. 66-2. For the reasons stated above, I find that notice and public comment under 5 U.S.C. 553(b) are impracticable and contrary to the public interest. Further, I find that good cause exists for making this rule effective immediately upon issuance. I also find that this action is fully consistent with my obligations under 49 U.S.C. Section 40105(b)(1) to ensure that I exercise my duties consistently with the obligations of the United States under international agreements.

### **Regulatory Evaluation**

This amendment is relieving in nature and suspends indefinitely the restrictions of flights between the United States, Serbia and Montenegro. In addition, the cost to circumnavigate the territory by U.S.-registered aircraft is removed by this action. Accordingly, this action will impose no additional burden on commercial or private operators.

### **Paperwork Reduction Act**

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

### **International Trade Impact Assessment**

SFAR No. 66-2 does not prohibit U.S. and foreign air carriers from engaging in the sale of air transportation to or from Serbia and Montenegro, nor does it impose any restrictions on commercial carriers beyond those imposed by DOT Order 92-6-27. The FAA, therefore, determined that SFAR No. 66-2 would not create a competitive advantage or disadvantage for foreign companies in the sale of aviation products or services in the United States, nor for domestic firms in the sale of aviation products or services in foreign countries. Accordingly, the suspension of SFAR No. 66-2 also will not create a competitive advantage or disadvantage for foreign companies in the sale of aviation products or services in foreign countries.

### **Federalism Determination**

The amendment set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612 (52 FR 4168; October 30, 1987), it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons set forth above, the FAA has determined that this action is not a "significant regulatory action" under Executive Order 12866. This action is considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Because

*Authority:* 49 U.S.C. 106(g), 1155, 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46502, 46504, 46506, 46507, 47122, 47508, 47528–47531; articles 12 and 29 of the Convention on International Civil Aviation (61 stat. 1180).

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(a) No person shall operate an aircraft from any point in the United States to any point in the Federal Republic of Yugoslavia (Serbia and Montenegro) (hereinafter "Serbia and Montenegro"), a flight having any intermediate or ultimate destination in Serbia and Montenegro, or a flight that includes a landing at any point in Serbia and Montenegro in its intended itinerary;

(b) No person shall operate an aircraft to any point in the United States from any point in Serbia and Montenegro, or a flight from any intermediate point of departure where the origin of the flight is in Serbia and Montenegro, or a flight that includes a departure from any point in Serbia and Montenegro in its intended itinerary; or

(c) No person shall operate an aircraft over the territory of the United States if that aircraft's flight itinerary includes any landing at or departure from any point in Serbia and Montenegro.

3. *Permitted operations.* This SFAR shall not prohibit the flight operations between the United States, Serbia and Montenegro described in section 2 of this SFAR by an aircraft authorized to conduct such operations by the United States Government.

4. *Emergency situations.* In an emergency that requires immediate decision and action for the safety of the flight, the pilot in command of an aircraft may deviate from this SFAR to the extent required by that emergency. Any deviation required by an emergency shall be reported as soon as possible to the air traffic control facility having jurisdiction.

5. *Expiration.* **【This Special Federal Aviation Regulation is suspended indefinitely.】**

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stan by any United States air carrier and commercial operator, by any person exercising the privileges of an airman certificate issued by the FAA, or by a operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. This action is taken to prevent an undue hazard to persons and aircraft engaged in such flight operations as a result of the ongoing civil war in Afghanistan.

**DATES:** *Effective Date:* May 10, 1994. *Expiration Date:* May 10, 1995.

**FOR FURTHER INFORMATION CONTACT:** Patricia Lane, Airspace and Air Traffic Law Branch, (AGC-230), or Mark W. Bury, International Affairs and Legal Policy Staff, (AGC-7), Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3491.

## **SUPPLEMENTARY INFORMATION:**

### **Availability of Document**

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center, APA-230, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the number of this SFAR. Persons interested in being placed on a mailing list for future rules should also request a copy of Advisory Circular No. 11-2A, which describes the application procedure.

### **Background**

The Federal Aviation Administration (FAA) is responsible for the safety of flight in the United States and for the safety of U.S.-registered aircraft and U.S. operators throughout the world. Section 103(1) of the Federal Aviation Act of 1958 (Act) declares, as a matter of policy, that the regulation of air commerce to promote safety is in the public interest. Section 601(a) of the Act provides the FAA with broad authority to carry out this policy by prescribing regulations governing the practices, methods, and procedures necessary to ensure safety in air commerce. In the exercise of these statutory responsibilities, the FAA has determined that the current civil war in Afghanistan justifies the imposition of certain measures to ensure the safety of U.S.-registered aircraft and operators that are conducting flight operations in the vicinity of Afghanistan's territory and airspace.

Fighting between the current government and various factions had been localized to an area around Kabul and the northern portion of the country. However, recent fighting has intensified and spread to a larger area of the country. Areas of northern Afghanistan, including major airbases and military garrisons at Mazare Sharif, have come under the control of heavily armed insurgent forces opposed to the Kabul regime.

Government and rebel forces possess a wide range of sophisticated weapons that potentially could be used to attack overflying civil aviation aircraft at cruising altitudes. These weapons include various surface-to-air missiles (SAMs) and antiaircraft artillery. Russian made fighter and attack aircraft, armed with cannons and air-to-air missiles, are also being utilized by government and rebel forces. Opposition forces have attacked Kabul with rockets, artillery, and bombs. Government aircraft have countered with air strikes on rebel airfields and other key facilities. According to press reports, some air-to-air encounters have occurred between aircraft from

to avoid the Termez-Mazare-Sharif-Kabul air corridor. On January 21, a communiqué was issued by the Coordination Council of the Afghan opposition calling on all international airline organizations to restrict passenger-carrying aircraft from flying in Afghan airspace. On February 22, 1994, the British government issued a notice advising that there may be a risk to civilian aircraft flying along certain air routes in northern and southern Afghanistan, and that British and Hong Kong carriers are now avoiding these routes. ICAO also has issued a directive urging air carriers to discontinue flights over Afghanistan. These notices and the communiqué reflect the violent and uncertain nature of the situation and underscore the danger to flights in Afghan airspace.

While there are no indications that any faction in Afghanistan intends to deliberately target civil aircraft, both sides have the capability to do so and such a possibility cannot be ruled out in the current environment. At the very least, central Afghan government control over installations critical to navigation and communication cannot be assured. Use of combat aircraft and SAMs by all factions in the conflict calls into question the security of Afghan airspace for civilian aircraft. It is uncertain how long these conditions will last.

### **Prohibition Against Certain Flights Within the Territory and Airspace of Afghanistan**

On the basis of the above information, and in furtherance of my responsibilities to promote the safety of flight of civil aircraft in air commerce, I have determined that immediate action by the FAA is required to prevent the injury to or loss of certain U.S.-registered aircraft and U.S. operators conducting flights in the vicinity of Afghanistan. I find that the current civil war in Afghanistan presents an immediate hazard to the operation of civil aircraft in the territory and airspace of Afghanistan. Accordingly, I am ordering a prohibition of flight operations (excluding those operations approved by the U.S. Government and emergency operations) within the territory and airspace of Afghanistan by any United States air carrier and commercial operator, by any person exercising the privileges of an airman certificate issued by the FAA, or by an operator using a aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. This action is necessary to prevent an undue hazard to aircraft and to protect persons on board those aircraft. Because the circumstances described in this notice warrant immediate action by the FAA to maintain the safety of flight, I also find that notice and public comment under 5 U.S.C. 553(b) are impracticable and contrary to the public interest. Further, I find that good cause exists for making this rule effective immediately upon issuance. I also find that this action is fully consistent with my obligations under section 1102(a) of the Federal Aviation Act to ensure that I exercise my duties consistently with the obligations of the United States under international agreements. The Department of State has been advised of, and has no objection to, the action taken herein.

The rule contains an expiration date of May 10, 1995, but may be terminated sooner or extended through the publication of a corresponding notice if circumstances so warrant.

### **Regulatory Evaluation Summary**

#### *Benefits*

This regulation will generate potential benefits in the form of ensuring that the current acceptable level of safety continues for U.S. commercial air carriers and other operators. The potential benefits of this action will accrue only to those air carriers and other operators currently engaging in overflights of Afghanistan's territory. Since this action is proactive rather than reactive, there are no statistics from which a quantitative estimate of benefits can be derived.

as the result of diverting from their normal flight routes over Afghanistan between Europe, Africa, and Asia. Since the FAA does not know at this time to what extent the potential cost of compliance will be, the FAA solicits comments from potentially affected operators. Please provide detailed cost information on the extent the action will impose costs in the form of additional preflight planning and circumnavigation of Afghanistan's territory.

### **Paperwork Reduction Act**

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

### **International Trade Impact Assessment**

This final rule could have an impact on the international flights of U.S. air carriers and commercial operators because it will restrict their ability to overfly the territory of Afghanistan and therefore may impose additional costs relating to the circumnavigation of Afghanistan's territorial airspace. This final rule will not restrict the ability of foreign air carriers to overfly Afghanistan's territory. Given the narrow scope of this rule, it will not eliminate existing or create additional barriers to the sale of foreign aviation products in the United States or to the sale of U.S. aviation products and services in foreign countries.

### **Federalism Determination**

The SFAR set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612 (52 FR 41685; October 30, 1987), it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons set forth above, FAA has determined that this action is not a "significant regulatory action" under Executive Order 12866. This action is considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Because revenue flights to Afghanistan are not currently being conducted by U.S. air carriers or commercial operators, the FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulation Flexibility Act.

### **The Amendment**

For the reasons set forth above, the Federal Aviation Administration is amending 14 CFR part 91 effective May 10, 1994.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. app. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et seq.*, E.O. 11514, 35 FR 4247, 3 CFR, 1966-1970 Comp., p. 902; 49 U.S.C. 106(g).

the prohibition on flight operations within the territory and airspace of Afghanistan by any United States air carrier and commercial operator, by any person exercising the privileges of an airman certificate issued by the FAA, or by an operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. This action is taken to prevent an undue hazard to persons and aircraft engaged in such flight operations as a result of the ongoing civil war in Afghanistan.

**DATES:** *Effective date:* May 10, 1995. *Expiration date:* May 10, 1996.

**FOR FURTHER INFORMATION CONTACT:** Mark W. Bury, International Affairs and Legal Policy Staff (AGC-7), Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3515.

## **SUPPLEMENTARY INFORMATION:**

### **Availability of Document**

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center (APA-230), 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the number of this SFAR. Persons interested in being placed on a mailing list for future rules should also request a copy of Advisory Circular No. 11-2A, which describes the application procedure.

### **Background**

The Federal Aviation Administration (FAA) is responsible for the safety of flight in the United States and for the safety of U.S.-registered aircraft and U.S. operators throughout the world. Section 40101(d)(1) of Title 49, United States Code, declares, as a matter of policy, that the regulation of air commerce to promote safety is in the public interest. Section 44701(a) of Title 49, United States Code, provides the FAA with broad authority to carry out this policy by prescribing regulations governing the practices, methods, and procedures necessary to ensure safety in air commerce.

In the exercise of these statutory responsibilities, the FAA issued SFAR 67, prohibiting flight operations within the territory and airspace of Afghanistan by any United States air carrier or commercial operator, any person exercising the privileges of an airman certificate issued by the FAA, or any operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. Notice of SFAR 67 was published at 59 FR 25282 (May 13, 1994). The FAA issued SFAR 67 based upon a determination that the ongoing civil war in Afghanistan justified the imposition of certain measures to ensure the safety of U.S.-registered aircraft and operators that are conducting flight operations in the vicinity of Afghanistan's territory and airspace.

Fighting between government and opposition forces continues throughout Afghanistan at a similar level and intensity as was noted when SFAR 67 was originally issued. Government and opposition forces still possess a wide range of sophisticated weapons that potentially could be used to attack civil aviation aircraft overflying Afghanistan at cruising altitudes. These weapons include Russian-made fighter and attack aircraft armed with cannons and air-to-air missiles, and surface-to-air missile (SAMs) systems. Although government and opposition aircraft primarily

## **The Amendment**

For the reasons set forth above, the Federal Aviation Administration is amending 14 CFR part 91 effective May 10, 1995.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. app. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 *et seq.*, E.O. 11514, 35 FR 4247, 3 CFR, 1966-1970 Comp., p. 902; 49 U.S.C. 106(g).

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### **Special Federal Aviation Regulation No. 67**

#### **Prohibition Against Certain Flights Within the Territory and Airspace of Afghanistan**

**Adopted: May 9, 1996**

**Effective: May 10, 1996**

**(Published in 61 FR 24430, May 14, 1996)**

**SUMMARY:** This action amends Special Federal Aviation Regulation (SFAR) 67 to extend the prohibition on flight operations within the territory and airspace of Afghanistan by any United States air carrier and commercial operator, by any person exercising the privileges of an airman certificate issued by the FAA, or by an operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. This action is taken to prevent an undue hazard to persons and aircraft engaged in such flight operations as a result of the ongoing civil war in Afghanistan.

**DATES:** *Effective Date:* May 10, 1996. *Expiration Date:* May 10, 1997.

**FOR FURTHER INFORMATION CONTACT:** Mark W. Bury, International Affairs and Legal Policy Staff (AGC-7), Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3515.

#### **SUPPLEMENTARY INFORMATION:**

##### **Availability of Document**

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Rulemaking, Attention: ARM-1, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-9677. Communications must identify the number of this SFAR. Persons interested in being placed on a mailing list for future rules should also request a copy of Advisory Circular No. 11-2A, which describes the application procedure.

##### **Background**

The Federal Aviation Administration (FAA) is responsible for the safety of flight in the United States and for the safety of U.S.-registered aircraft and U.S. operators throughout the

carrier or commercial operator, any person exercising the privileges of an airman certificate issued by the FAA, or any operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. Notice of SFAR 67 was published at 59 FR 25282 (May 13, 1994). The FAA issued SFAR 67 based upon a determination that the ongoing civil war in Afghanistan justified the imposition of certain measures to ensure the safety of U.S.-registered aircraft and operators that are conducting flight operations in the vicinity of Afghanistan's territory and airspace. SFAR 67 was originally scheduled to expire after one year. Notice of the extension of SFAR 67 for an additional year was published at 60 FR 25980 (May 15, 1995).

Fighting between government and opposition forces continues throughout Afghanistan at a level and intensity similar to that noted when SFAR 67 was originally issued. Opposing forces in this long-running civil war possess a wide range of sophisticated weapons that potentially could be used to attack civil aviation aircraft overflying Afghanistan at cruising altitudes. These weapons include Russian-made fighter and attack aircraft armed with cannons and air-to-air missiles, and surface-to-air missile (SAM) systems. Although aircraft primarily have been used for ground attacks against airfields and other key facilities, air-to-air encounters also have been observed. Press reports also suggest that a number of Afghan military and civilian aircraft have been shot down using SAMs. Large areas of the country continue to be the scene of factional fighting. Fluctuations in the level and intensity of combat create an unsafe environment for transiting civilian aircraft.

Advisories have been issued by the International Civil Aviation Organization (ICAO) urging civil air carriers to avoid Afghan airspace. In a letter dated April 8, 1994, Assad Kotaite, President of the ICAO Council, issued a notice urging air carriers to discontinue flights over Afghanistan. In a subsequent letter of November 14, 1994, President Kotaite warned of the continuing risks associated with flights over Afghanistan, including operations using certain routes developed by the Afghan Government or neighboring countries. On September 18, 1995, in yet another letter addressing flight safety over Afghanistan, Dr. Kotaite advised that "the safety of international civil flight operations through the Kabul FIR can not be assured." These advisories reflect the uncertain nature of the situation and underscore the danger to flights in Afghan airspace.

There also are indications that at least two rebel factions in Afghanistan intend to deliberately target civil aircraft. In a statement released in September 1995, forces opposed to the Rabbani Government warned all international air carriers that they would force or shoot down any plane that ventured into airspace they controlled without first obtaining proper clearance from them. This follows a similar warning issued in 1994 by the Opposition Council. Air corridors over central and southern Afghanistan have been closed frequently as a result of these threats. Although it seems unlikely that any faction in the civil war would deliberately target a foreign-flagged commercial air carrier, their growing frustration with the airlift of arms, ammunition and other supplies to the Kabul regime creates a potentially hazardous environment whereby an airliner might be misidentified and inadvertently targeted. The FAA has received reports that scheduled passenger flights have been intercepted by opposition fighter aircraft. Other reports indicate that charter flights have been forced to land in Kandahar; one of these aircraft and its crew continue to be held there.

At the very least, central Afghan government control over installations critical to navigation and communication can not be assured. The use of combat aircraft and SAMs by all factions in the conflict calls into question the security/safety of Afghan airspace for civilian aircraft. An environment for long-term stability in this troubled region has yet to emerge.



those operations approved by the U.S. Government and certain emergency operations) within the territory and airspace of Afghanistan by any United States air carrier and commercial operator, by any person exercising the privileges of an airman certificate issued by the FAA, or by an operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. This action is necessary to prevent an undue hazard to aircraft and to protect persons and property on board those aircraft. Because the circumstances described in this notice warrant immediate action by the FAA to maintain the safety of flight, I also find that notice and public comment under 5 U.S.C. 553(b) are impracticable and contrary to the public interest. Further, I find that good cause exists for making this rule effective immediately upon issuance. I also find that this action is fully consistent with my obligations under 49 U.S.C. 40105(b)(1)(A) to exercise my duties consistently with the obligations of the United States under international agreements. The Department of State has been advised of, and has no objection to, the action taken herein.

The rule now contains an expiration date of May 10, 1997, but may be terminated sooner or extended through the publication of a corresponding notice if circumstances so warrant.

### **Regulatory Evaluation**

Over the past 10 years, there have been a number of instances worldwide where civilian aircraft were either shot at or shot down. In some instances, the shooting was intentional, while in others the aircraft was misidentified as an enemy aircraft. One such reported incident, described earlier, involved Afghan government forces mistakenly shooting at a civilian aircraft. This incident highlights the risk that one side in the Afghan civil war will misidentify a U.S. civil aircraft overflying Afghanistan as a hostile aircraft. One faction involved in the fighting in Afghanistan has specifically stated that it would target the aircraft of an Afghan air carrier. This stated threat increases the risk of a U.S. aircraft being misidentified and shot down.

Navigating around Afghanistan will result in increased variable operating costs (i.e., maintenance, fuel, and crew) primarily for U.S. operators who conduct flights between Europe and India. The FAA estimates that the weighted-average variable operating cost for a wide-body aircraft is approximately \$3,100 per hour. Based on data received from two U.S. carriers, the amount of additional time it takes to navigate around Afghanistan using alternate routes ranges from 10 minutes by flying over Iran to between one and four hours by flying over Saudi Arabia (depending on flight's origin and destination).

Some U.S. operators use the alternate route over Iran, thereby incurring little, if any, additional flying time and operating costs. Two U.S. operators use routes over Saudi Arabia, which result in additional costs of approximately \$3,100 to \$12,400 per flight.

Based on the potentially small costs of navigating around Afghanistan and the potentially devastating result of a U.S. air carrier being shot down, the FAA has determined that the SFAR is cost-beneficial.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by Federal regulations. The RFA requires a Regulatory Flexibility Analysis if a proposed rule would have "significant economic impact on a substantial number of small entities." FAA Order 2100.14A outlines the FAA's procedures and criteria for implementing the RFA. The FAA has determined that

of the SFAR and the small incremental cost of some of the alternate routes available to U.S. operators, the FAA has determined that the SFAR would have little effect on the sale of U.S. aviation products and services in foreign countries.

### **Paperwork Reduction Act**

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*)

### **Federalism Determination**

The SFAR set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612 (52 FR 41685; October 30, 1987), it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons set forth above, FAA has determined that this action is not a "significant regulatory action" under Executive Order 12866. This action is considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Because revenue flights to Afghanistan are not currently being conducted by U.S. air carriers or commercial operators, the FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **The Amendment**

For the reasons set forth above, the Federal Aviation Administration is amending 14 CFR part 91 effective May 10, 1996.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. 106(g), 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46502, 46504, 46506-46507, 47122, 47508, 47528-47531.

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airspace. In a letter dated April 8, 1994, President Assad Kotaite of ICAO issued a notice urging air carriers to discontinue flights over Afghanistan. In a subsequent letter of November 14, 1994, President Kotaite warned of the continuing risks associated with flights over Afghanistan, including operations using certain routes developed by the Afghan Government or neighboring countries. In January 1994, the Russian civil aviation authority released a service message warning that because of military aircraft operations around Kabul and in northern Afghanistan, civil aircraft were advised to avoid the Termez-Mazare Sharif-Kabul air traffic corridor and to increase enroute flight levels as much as possible. These advisories reflect the uncertain nature of the situation and underscore the danger to flights in Afghan airspace.

There also are indications that at least one faction in Afghanistan intends to deliberately target civil aircraft. In September 1994, the Supreme Coordination Council for the Islamic Revolution in Afghanistan issued a press release warning that it would attempt to shoot down any Afghan Ariana Airlines aircraft operating in Afghan airspace. Although it seems unlikely that any action in the civil war would deliberately target a foreign-flagged air carrier, the potential for misidentification or inadvertent targeting is a real possibility. The FAA has received at least one report that a civil aircraft was the target of anti-aircraft fire by Afghan government forces.

At the very least, central Afghan government control over installations critical to navigation and communication cannot be assured. Use of combat aircraft and SAMs by all factions in the conflict calls into question the security of Afghan airspace for civilian aircraft. An environment for long-term stability in this troubled region has yet to emerge.

#### **Prohibition Against Certain Flights Within the Territory and Airspace of Afghanistan**

On the basis of the above information, and in furtherance of my responsibilities to promote the safety of flight of civil aircraft in air commerce, I have determined that continued action by the FAA is required to prevent the injury to or loss of certain U.S.-registered aircraft and U.S. operators conducting flights in the vicinity of Afghanistan. I find that the current civil war in Afghanistan continues to present an immediate hazard to the operation of civil aircraft in the territory and airspace of Afghanistan. Accordingly, I am ordering the amendment of SFAR 67 to extend the prohibition on flight operations (excluding those operations approved by the U.S. Government and certain emergency operations) within the territory and airspace of Afghanistan by any United States air carrier and commercial operator, by any person exercising the privileges of an airman certificate issued by the FAA, or by an operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. This action is necessary to prevent an undue hazard to aircraft and to protect persons and property on board those aircraft. Because the circumstances described in this notice warrant immediate action by the FAA to maintain the safety of flight, I also find that notice and public comment under 5 U.S.C. 553(b) are impracticable and contrary to the public interest. Further, I find that good cause exists for making this rule effective immediately upon issuance. I also find that this action is fully consistent with my obligations under 49 U.S.C. 40105(b)(1)(A) to exercise my duties consistently with the obligations of the United States under international agreements. The Department of State has been advised of, and has no objection to, the action taken herein.

The rule now contains an expiration date of May 10, 1996, but may be terminated sooner or extended through the publication of a corresponding notice if circumstances so warrant.

ignoring the significant operating costs that it would incur in operating an Afghan air carrier. This stated threat increases the risk of a U.S. aircraft being mis-identified and shot down.

Navigating around Afghanistan will result in increased variable operating costs (*i.e.*, maintenance, fuel, and crew) primarily for U.S. operators who conduct flights between Europe and India. The FAA estimates that the weighted-average variable operating cost for a wide-body air carrier is approximately \$3,100 per hour. Based on data received from two U.S. carriers, the amount of additional time it takes to navigate around Afghanistan using alternate routes ranges from 10 minutes by flying over Iran to between one and four hours by flying over Saudi Arabia (depending on where the flight originated).

Some U.S. operators use the alternate route over Iran, thereby incurring little, if any, additional flying time and operating costs. Two U.S. operators use routes over Saudi Arabia, which result in additional costs of approximately \$3,100 to \$12,400 per flight.

Based on the potentially small costs of navigating around Afghanistan and the potentially devastating result of a U.S. air carrier being shot down, the FAA has determined that the SFAR is cost-beneficial.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by Federal regulations. The RFA requires a Regulatory Flexibility Analysis if a proposed rule would have "significant economic impact on a substantial number of small entities." FAA Order 2100.14A outlines the FAA's procedures and criteria for implementing the RFA. The FAA has determined that none of the U.S. air carriers affected by the SFAR are "small entities" as defined by FAA Order 2100.14A. Thus, the SFAR would not impose a "significant economic impact on a substantial number of small entities."

### **International Trade Impact Assessment**

The SFAR could have an adverse affect on the international flights of U.S. air carriers and commercial operators primarily because it could increase their operating costs relative to foreign carriers who continue to overfly Afghanistan. However, because of the narrow scope of the SFAR and the small incremental cost of some of the alternate routes available to U.S. operators, the FAA contends that the SFAR would have little, if any, affect on the sale of U.S. aviation products and services in foreign countries.

### **Paperwork Reduction Act**

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

### **Federalism Determination**

The SFAR set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612 (52 FR 41685; October 30, 1987), it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

2. *Flight prohibitions.* Except as provided in paragraph 3 and 4 of this SFAR, no person described in paragraph 1 may conduct flight operations within the territory and airspace of Afghanistan.

3. *Permitted operators.* This SFAR does not prohibit persons described in paragraph 1 from conducting flight operations within the territory and airspace of Afghanistan where such operations are authorized either by exemption issued by the Administrator or by another agency of the United States Government with the approval of the FAA.

4. *Emergency situations.* In an emergency that requires immediate decision and action for the safety of the flight, the pilot in command of an aircraft may deviate from this SFAR to the extent required by that emergency. Except for U.S. air carriers and commercial operators that are subject to the requirements of 14 CFR 121.557, 121.559, or 135.19, each person who deviates from this rule shall, within ten (10) days of the deviation, excluding Saturdays, Sundays, and Federal holidays, submit to the nearest FAA Flight Standards District Office a complete report of the operations of the aircraft involved in the deviation, including a description of the deviation and the reasons therefor.

5. *Expiration.* This Special Federal Aviation Regulation expires **【May 10, 1997.】**

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**SUMMARY:** This action establishes certain procedural, operational and equipment requirements for air tour operators in the State of Hawaii. This emergency rule is necessary because of an escalation of air tour accidents. The regulation is intended to enhance the safety of air tour operations within the State.

**DATES:** This final rule is effective October 26, 1994. Comments must be received on or before December 27, 1994.

**ADDRESSES:** Send comments on this final rule in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC-200), Docket No. 27919, 800 Independence Ave., SW., Washington, DC 20591. Comments delivered must be marked Docket No. 27919. Comments may be examined in room 915G weekdays between 8:30 a.m. and 5 p.m., except on Federal holidays.

Commenters who wish the FAA to acknowledge the receipt of their comments must submit with their comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 27919." The postcard will be date stamped by the FAA and returned to the commenter.

**FOR FURTHER INFORMATION CONTACT:** Brian Calendine, Air Transportation Division, AFS-200, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-8166.

## **SUPPLEMENTARY INFORMATION:**

### **Availability of Final Rule**

Any person may obtain a copy of this final rule by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA-220, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3485. Requests should be identified by the docket number of this rule.

Persons interested in being placed on a mailing list for notices of proposed rulemaking should request a copy of Advisory Circular No. 11-2A, "Notice of Proposed Rulemaking Distribution System," which describes the application procedure.

### **Background**

#### *The Air Tour Industry*

Since 1980, the air tour industry in the State of Hawaii has grown rapidly, particularly on the islands of Oahu, Kauai, Maui, and Hawaii. The growth of the tourist industry, the beauty of the islands, and the inaccessibility of some areas on the islands has generated tremendous growth in the number of air tour flights. In 1982, there were approximately 63,000 helicopter and 11,000 airplane air tour flights. By 1991, these numbers had increased to approximately 101,000 for helicopters and 18,000 for airplanes. After a slight decline due to Hurricane Iniki in 1992, air tour flights in 1994 are projected to reach the 1991 levels. In Hawaii, the air tour industry carries about 400,000 passengers annually. Thirty-eight operators are conducting air tours within the State of Hawaii, using approximately 97 helicopters and 16 fixed-wing aircraft. During the 9-year period between 1982 and 1991, there were eight fatal accidents with 24 fatalities. The accident data shows an escalation of fatal accidents during the 3-year

Some air tour operators advertise dramatic overwater flights to view whales, shorelines, cliffs, and waterfalls; entry into one-way canyons; flying close to hot molten lava; and hovering over the shoreline where molten lava flows into the ocean. Some advertising brochures, for example, describe air tours as "excitement to the boiling point," and invite tourists to "fly into the heart and heat of an active volcano" and "close enough to waterfalls to feel the cooling mist." One fixed-wing air tour operator formerly advertised that "[w]e fly you lower and slower than any twin engine plane can . . . lower and slower than many helicopters do . . ."

While passengers are often attracted to the thrill associated with low-flying air tours, they are generally not aware of the risks involved. Risks associated with low flying air tour operations include: unpredictable winds that create less stable flying conditions; fewer options to escape unforeseen weather; unmarked or unknown obstructions; less time to select suitable emergency landing areas; increases in pilot workload because of quick stops, rapid turns, and watching for obstructions; inability to be detected by air traffic control radar; inability to conduct two-way radio communication; increased likelihood of ingesting foreign debris, including salt water spray, into the engine; less overall reaction time; and congestion of low flying traffic at scenic locations. Further, many air tours are conducted over scenic areas along rugged coasts, where, in the event of an engine failure, the pilot must ditch in the ocean. A helicopter without flotation devices, unlike most light airplanes, may sink within moments.

#### *History and Escalation of Accidents*

The growth of the air tour sightseeing industry in Hawaii has been associated with an escalation of accidents. The proximate causes of the accidents range from engine power loss to encounters with adverse weather. Contributing factors to the causes and seriousness of accidents are: operation beyond the demonstrated performance envelope of the aircraft, inadequate preflight planning for weather and routes, lack of survival equipment, and flying at low altitudes (which does not allow time for recovery or forced landing preparation in the event of a power failure).

The following table is a synopsis of selected air tour accidents involving aircraft damage, minor or serious injuries, or fatalities that occurred between September 1982 and September 1994.

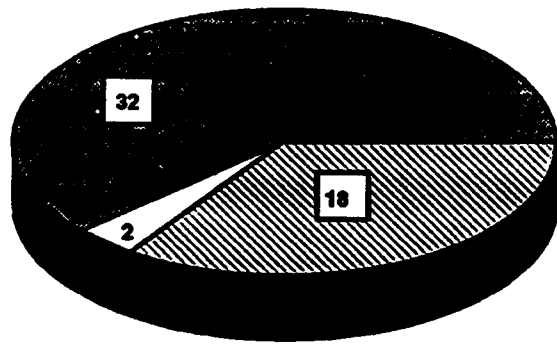
**Selected Air Tour Accidents in Hawaii, September 1982–September 1994**

<i>Date</i>	<i>Type</i>	<i>Part</i>	<i>Location</i>	<i>Injuries</i>	<i>Fatalities</i>
9/2/82	Bell 206-L .....	135	Lihue .....	2 serious .....	.....
				3 minor .....	.....
4/8/84	Grumman AA-5A .....	91	Kamuela .....	.....	4
9/26/85	Aerospatiale .....	135	Kula .....	5 minor .....	1
1/1/86	Cessna R172K .....	135	Kamuela .....	4 serious .....	1
5/18/86	Bell 206B .....	91	Maui .....	1 serious .....	2
				1 minor .....	.....
3/29/87	Bell 206B .....	135	Kona .....	3 serious .....	1
				1 minor .....	.....
4/24/87	Cessna 172N .....	91	Lihue .....	.....	4
5/29/88	Bell 206B .....	135	Honolulu .....	2 minor .....	.....
5/20/89	Aerospatiale AS350D .....	135	Waialae Falls .....	7 minor .....	.....
6/11/89	Beech H18 .....	135	Waipio Valley .....	.....	.....



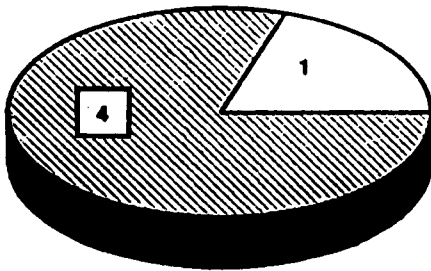
11/9/91	Bell 206B .....	135	Hilo .....	1 minor .....	.....
				1 serious .....	.....
4/22/92	Beech E18S .....	135	Mount Haleakala .....	2 minor .....	.....
9/16/92	Aerospatiale AS350B .....	135	Hana .....	.....	9
9/21/92	Bell 47 .....	91	Volcano National Park .....	.....	7
1/25/93	Fairchild Hiller FH-1100 .....	91	Volcano National Park .....	3 minor .....	.....
2/23/94	Aerospatiale AS350B .....	135	Volcano National Park .....	1 minor .....	4
				1 serious .....	.....
				1 minor .....	.....
3/25/94	Hughes 369D .....	135	Hawaii National Park .....	.....	.....
4/18/94	Hughes 369D .....	135	Waimea .....	4 serious .....	1
7/14/94	Aerospatiale AS350D .....	135	Hanalei .....	.....	3
7/14/94	Aerospatiale AS350D .....	135	Molokai .....	.....	.....
8/11/94	Aerospatiale AS350D .....	135	Waipio Valley .....	.....	.....
9/3/94	Hughes 369D .....	135	Hilo .....	.....	.....

The table shows a total of 24 air tour fatalities between 1982 and 1991 (9 years). Even though there was a decline in the number of air tour flights in 1992, the accident data show an escalation of fatal accidents between 1991 and 1994. From July 1991 through July 1994 (3 years), there were 20 air tour accidents involving 24 fatalities. (See figure.) Since January 1993, three helicopter accidents have involved landings in the ocean with two of those accidents resulting in seven fatalities. The most recent fatal accident occurred on July 14, 1994. The most recent non-fatal accident occurred on September 3, 1994. (See table.)



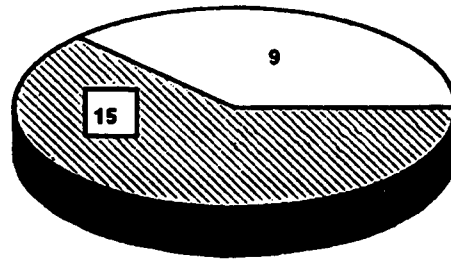
-  Helicopter Air Tour
-  Airplane Air Tour
-  Other than Air Tour (all categories)

**Fatal Air Tour Accidents 5**



-  Helicopter
-  Airplane

**Air Tour Fatalities 24**



-  Helicopter
-  Airplane

**SOURCE: NTSB**

due to air tour operations," and "[c]reate special operating rules for such airspace to reduce the potential for midair collisions and other accidents commensurate with meteorological and terrain considerations." (A-93-10) In response to the NTSB's recommendations, the FAA has informed the NTSB that it is considering a special rule for air tour operators in Hawaii.

Based on the NTSB recommendations, accident investigations, and discussions with the NTSB, the FAA has identified the following as needing to be addressed:

- (1) Air tour operators fly too close and too low to various attractions and land features.
- (2) There is no clear definition of "suitable landing site" for helicopters.
- (3) Sightseeing helicopters are operating in the avoid area of the height-speed envelope (deadman's curve) where successful autorotations are not possible.
- (4) Helicopters operating along the shorelines of the Hawaiian Islands should be equipped with appropriate flotation equipment.
- (5) Passengers should be briefed before flights on the use of flotation gear.

#### **Actions Other Than Rulemaking to Address the Problems**

The FAA, the State of Hawaii, and the air tour industry have been attempting to correct safety problems that affect air tour operations.

In 1986, the FAA conducted a study of helicopter sightseeing operations in Hawaii. The study team was composed of representatives from the FAA, the State of Hawaii, and industry. Based on the study, recommendations were made to the State and to operators in Hawaii to improve safety and community relations. Recommendations included the following:

(1) The FAA should study the possibility of imposing limitations, through operations specifications, that would require the helicopter to be operated at a combination of height and forward speed (including hover) that would permit a safe landing in event of engine power loss, in accordance with the height-speed envelope for that helicopter under current weight and aircraft altitude. These limitations would also prevent the helicopter from being flown over areas in which a safe forced landing could not be made.

(2) The FAA should advise helicopter operators who conduct passenger-carrying operations under part 91 or part 135 that a flight (1) over an area in which a successful forced landing could not be made, or (2) at an airspeed and altitude combination that places the aircraft beyond its performance capability to successfully autorotate, would be considered a reckless operation under § 91.13 (formerly § 91.9).

The study team was also concerned about the lack of helicopter flotation equipment on some aircraft, particularly for operations along the coastlines of the islands, where cliffs and rocks make a successful autorotation to shore virtually impossible. The team believes that the shoreline must offer a reasonable chance to land safely in the event of engine failure, and that, if no such area exists, appropriate helicopter flotation equipment should be required.

Also, in 1986, the FAA conducted a joint study with the State of Hawaii on helicopter heliport and airport access. A result of that study was the Helicopter Operating Plan for Hawaii. Based on portions of that plan, the Hawaiian Helicopters Operators Association (HHOA) developed its "Fly Neighborly" program. The HHOA plan calls for voluntary compliance with a standoff distance of 1,500 feet and a minimum altitude of 1,500 feet over communities. In addition, the plan calls for a 3,000-foot standoff distance in areas of Volcanoes National

In January 1994, the FAA held four public meetings in Hawaii to investigate complaints regarding flight safety, aircraft noise, and possible intrusive flights of helicopters. While the vast majority of the commenters addressed the noise issue, some commenters did raise safety issues. Some of the public meeting comments and subsequent comments submitted to the FAA highlight a number of personal experiences of individuals who witnessed helicopters flying dangerously low over scenic areas and above people and property on the ground. In some instances, witnesses claimed that the aircraft flew lower than the people who were walking on high elevation trails.

The Honolulu Flight Standards District Office, during the past 3 years, has conducted an extensive inspection and surveillance program of the air tour industry. On July 15, 1994, in response to a number of recent accidents, the FAA initiated a comprehensive review of operations and maintenance practices of the Hawaiian air tour operators. In addition, the FAA requested that all air tour operators in the State of Hawaii immediately conduct a "stand down" safety review of their operational and maintenance practices.

### **Need for Emergency Rulemaking**

Despite the voluntary measures, the cooperation of the Hawaii air tour operators, and the FAA's inspections, the accident data show that additional measures are necessary to ensure safe air tour operations in Hawaii. The current regulatory scheme is not comprehensive enough to ensure the safety of all air tour operations in Hawaii.

Section 91.119 prescribes minimum altitudes for airplanes and helicopters that provide for the protection of persons and property on the surface. Generally, a pilot may not operate below an altitude allowing, if power failure occurs, an emergency landing without undue hazard to persons or property on the surface. Helicopters may be operated at lower altitudes than airplanes if the operation is conducted without hazard to persons or property on the surface and the pilot can conduct a safe emergency landing in the event of power failure.

Under ideal conditions, a helicopter, unlike an airplane, can land at or near zero forward speed, provided the landing area is relatively level and free of obstructions. Factors that make an emergency landing site unsuitable include obstacles, rugged terrain, congested areas and water. Obstacles range from natural terrain features and trees to buildings and utility towers with wires strung between them.

A major factor affecting safety of flight in any single engine aircraft at low altitude is the limited choice of suitable emergency landing areas. Hawaii's unique topography—active volcanoes spewing hot molten lava, sharp cliffs, cascading waterfalls, rugged coastlines, mist-shrouded mountains, dense tropical rainforests and deep, closed canyons—often complicates access to suitable emergency landing areas. The air tour accidents in Hawaii indicate that helicopter pilots have had insufficient time to locate suitable landing areas after engine power loss or other problems leading to accidents.

Based on the recent escalation of accidents caused by unsafe operating practices, and the fact that voluntary measures are insufficient, the FAA is implementing this emergency final rule as Special Federal Regulation (SFAR) No. 71.

### **The Special Federal Aviation Regulation**

The FAA is promulgating these requirements in an SFAR, rather than a general rule, to address the unique problems associated with the Hawaiian air tour operating environment.

or helicopter for compensation or hire. "Air tour operator" is defined as any person who conducts an air tour.

### **Flotation Devices**

The SFAR requires that any single-engine air tour helicopter flown beyond the shore of any island must be amphibious or equipped with emergency floats and approved flotation gear easily accessible for each occupant, or that each person on board the helicopter wear approved flotation gear. An amphibious helicopter or one equipped with floats will allow a safe emergency ditching. This requirement is specific to helicopters because helicopters, unlike airplanes, may sink rapidly after forced landings on water.

These requirements should reduce the risk of drowning, such as the deaths that occurred on January 25, 1993, when a helicopter, operating under part 91, crashed in deep water while on a sightseeing flight to view molten lava flowing into the ocean off the coast of Volcanoes National Park. Before the accident, the pilot had been hovering near the shoreline between 100 and 150 feet above sea level. When the pilot attempted to resume forward flight, he experienced a total left pedal failure. The pilot lost control and the helicopter landed in the ocean and sank. The helicopter was not equipped with flotation devices, and the pilot and four passengers were not wearing lifevests. Only the pilot survived. The NTSB found that a factor which contributed to the passengers' fatal injuries was the operator's failure to provide lifevests to the passengers.

In a July 14, 1994, accident, an air tour helicopter with seven people on board made a forced landing in the Pacific Ocean after losing power off Kauai's Na Pali Coast. Three passengers swam to shore and another was rescued from the water. The pilot and two other passengers drowned. The helicopter was not equipped with flotation devices, and the passengers did not have sufficient time to don the lifevests on board the helicopter.

Later, on the same day, a different air tour helicopter made a forced landing after losing power off the north coast of Molokai. All persons aboard the helicopter swam to shore and were rescued the next day. The helicopter was equipped with flotation devices, and the pilot and passengers had sufficient time to don the lifevests.

Flotation equipment on a helicopter should allow the helicopter to remain afloat long enough for the persons to egress safely; the individual flotation gear should allow the survivors an opportunity to swim to shore or to be picked up by rescue personnel. Flotation equipment/lifevests helped to ensure the survival of the passengers in the second accident on July 14.

The FAA is considering changing the rule to require that all single-engine helicopters conducting air tour operations beyond the shore of any island be amphibious or fitted with flotation devices. Therefore, the FAA is requesting comments on this possibility. At the close of the comment period, the FAA will analyze the comments received and, based on its analysis, determine if further rulemaking is necessary.

### **Helicopter Performance Plan**

Section 4 requires that, before departure, the air tour operator must complete a performance plan for the helicopter flight. The pilot in command (PIC) is required to comply with the performance plan. The plan must be based on information in the rotorcraft flight manual (RFM), considering the maximum density altitude to which the operation is planned and must address such elements as maximum gross weight and center of gravity, maximum gross weight for hovering in or out of ground effect, and maximum combination of weight, altitude, and tempera-

sightseeing flight to view Waialae Falls with six passengers on board. After hovering at a low altitude near the falls, the pilot began a pedal turn and forward movement for the initial climb away from the falls. The main rotor revolutions per minute (rpm) decayed, and the pilot turned back toward the upper falls, where he thought he could land. However, the helicopter settled into a ravine, damaging the helicopter and injuring the pilot and passengers. The NTSB determined that the probable cause of the accident was the pilot's failure to maintain rotor rpm, while turning and taking off from a hover with a relatively heavy gross weight. Additional factors related to the accident were the high density altitude and rough/uneven (rocky) terrain in the emergency landing area.

### **Helicopter Operating Limitations**

Section 5 requires that the PIC shall operate the helicopter at a combination of height and forward speed (including hover) that would permit a safe landing in the event of engine power loss, in accordance with the height-velocity envelope for that helicopter under current weight and aircraft altitude. This requirement is necessary to prevent pilots from hovering for periods of time beyond the performance capability of the helicopter and outside what the height-velocity diagram permits for safe operation.

This requirement prohibits aircraft from being operated in dangerous flight regimes, such as the January 25, 1993, accident discussed previously (when the pilot was hovering at a low altitude over a lava flow). It also is intended to prevent the type of accidents that occurred on March 25, 1994, and April 18, 1994. On March 25, 1994, the pilot of a Hughes 369D helicopter operated under part 135 lost control and collided with mountainous terrain by the Puu'oo Vent in Hawaii National Park. The helicopter had become enveloped in a steam cloud at a 40-foot hover just before the pilot lost control. The helicopter was destroyed; the pilot and passengers sustained minor injuries. On April 18, 1994, a Hughes 369D helicopter lost power during an OGE hover and collided with rocky terrain below Waimea Falls, Waimea, Kauai. The helicopter was on a sightseeing flight operated under part 135. The pilot and three passengers were seriously injured. One passenger was fatally injured.

The requirement increases the possibility of safe landing in the event of engine failure. A safe landing may not be possible if the helicopter is within the avoid area of the height-velocity envelope when the engine failure occurs.

### **Minimum Flight Altitudes**

Section 6 requires that, unless operating in compliance with an air traffic control clearance, or as otherwise authorized by the Administrator, air tour operations may not be conducted below an altitude of 1,500 feet above the surface; and closer than 1,500 feet from any person or property; or below any altitude provided by Federal statute or regulation. As noted earlier, Hawaii's unique topography often complicates access to suitable emergency landing areas. The air tour accidents in Hawaii have been characterized by insufficient time for pilots to locate suitable landing areas after engine power loss or other problems leading to accidents. The requirement to maintain an altitude of 1,500 feet above the surface is necessary for safety because it allows the pilot sufficient time to react in an emergency, to notify and instruct passengers, and to prepare for a forced landing. An aircraft operating at least 1,500 feet above the surface allows the pilot a greater opportunity to select a suitable landing site than would be the case at lower altitudes. The FAA notes that these minimum distances are consistent with HHOA's Fly Neighborly program.

The accident data also show low-flying aircraft flying VFR into instrument meteorological conditions (IMC). An additional benefit from the 1,500-foot minimum altitude will be the

noted that a contributing factor to the accident was the pilot's choice of a hover altitude/position inadequate to reach a shoreline in the event of an emergency.

On June 11, 1989, a Beechcraft BE-H18, operating under part 135 on a sightseeing flight, crashed near a waterfall in the Waipio Valley of the Kohala Mountains on the island of Hawaii. After filing a VFR flight plan, the pilot had departed Hilo International Airport for Maui. The pilot entered a closed canyon and ultimately impacted the canyon wall 600 to 900 feet below the rim. The pilot and 10 passengers were fatally injured, and the airplane was destroyed by impact forces and postcrash fire. The NTSB determined that the probable cause of the accident was the pilot's improper decision to maneuver with insufficient altitude in a canyon area.

On April 22, 1992, a Beechcraft E-18S operating on a VFR air tour flight collided with mountainous terrain in Haleakala National Park in an area where fog had reduced visibility around the mountain top. The FAA had provided a full weather briefing to the pilot, including an advisory that VFR flight was not recommended over the interior sections of all islands, and a forecast indicating isolated areas of 3 miles visibility due to haze and moderate rainshowers. The aircraft was destroyed, and the pilot and eight passengers were killed. Weather reports and witness statements indicate that IMC existed in the area at the time of the accident. The NTSB determined that the probable cause of this accident was the pilot's decision to continue visual flight into IMC that obscured rising mountainous terrain and his failure to use properly available navigational information to remain clear of the island.

On September 16, 1992, an Aerospatiale AS-350B departed on a sightseeing flight even though adverse weather conditions including thunderstorms, rainshowers, and poor visibility were reported. A witness reported rainshowers and mountain obscuration about the time of the accident. He stated that he saw a helicopter flying in and out of clouds and stated that he could not understand why a helicopter would be flying so close to the mountains given the adverse weather conditions. The NTSB determined that a probable cause of the accident, which involved seven fatalities, was the pilot's inflight decision to continue VFR flight into adverse weather conditions. A factor in the accident was the pilot's inability to see and avoid the mountainous terrain due to the thunderstorms.

#### **Briefing Passengers**

Section 7 contains the requirement that passengers be briefed (in addition to §§91.102 and 135.117) before takeoff for an air tour flight with a flight segment beyond the ocean shore of any island. The briefing shall include information on water ditching procedures, use of personal flotation gear, and emergency egress from the aircraft. The PIC must orally brief passengers, distribute written instructions, or ensure that passengers have been briefed on emergency procedures. This provision is necessary in light of the flotation equipment requirements set forth in this emergency rule.

#### **Related Rulemaking**

This SFAR is an emergency final rule addressing air tour operations in the State of Hawaii in light of the increasing frequency of accidents. The FAA is considering other rulemaking action to address noise and other issues concerning sightseeing overflights in national parks and other scenic areas. On March 17, 1994, the FAA and the National Park Service (NPS) issued a joint advance notice of proposed rulemaking (ANPRM) (59 FR 12740) seeking public comment on general policy and specific recommendations for voluntary and regulatory actions to address the effects of aircraft overflights on national parks. The FAA is currently analyzing

## Paperwork Reduction Act

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

### Regulatory Evaluation Summary

#### *Introduction*

Changes to Federal regulations are required to undergo several economic analyses. First, Executive Order 12866 directs each Federal agency to propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Office of Management and Budget directs agencies to assess the effect of regulatory changes on international trade. With respect to this rule, the FAA has determined that it: (1) is "a significant regulatory action" as defined in the Executive Order; (2) is significant as defined in the DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); (3) will have a significant impact on a substantial number of small entities; and (4) will not constitute a barrier to international trade. Therefore, a full regulatory analysis, which includes the identification and evaluation of cost-reducing alternatives to this rule, has been prepared. This regulatory evaluation summary presents a concise analysis of the costs and benefits associated with the final rule that amends the Federal Aviation Regulations by establishing certain operational, procedural, and equipment requirements for air tour operators in the State of Hawaii.

#### *Costs*

The FAA estimates the total cost of the SFAR to be about \$2.0 million, with a present value of \$1.8 million (7 percent discount rate), from 1995 to 1997. The FAA assumes that air tour operators will elect to have lifevests on board the helicopter rather than installing external flotation gear because the costs are dramatically lower. This present value cost includes the cost of about \$190,000 to provide lifevests on the affected helicopters; the potential of \$1.6 million in lost revenue to air tour operators due to minimum flight altitudes; and \$10,000 for the development of a helicopter performance plan. Other requirements of the rule—helicopter operating limitations and passenger briefing—will impose little if any cost.

#### *Benefits*

Since 1982, Hawaiian air tour operators have experienced 15 accidents involving at least one serious injury or fatality where the lack of flotation gear, flying into bad weather, or flying low has played a role in the cause of the accident. These accidents have resulted in 48 fatalities and 30 injuries (16 serious and 14 minor). This evaluation divides these accidents into three categories: (1) Inadvertent air tour helicopter water landings without flotation gear; (2) air tour helicopter accidents related to flying into bad weather or flying low; and, (3) air tour airplane accidents related to flying into bad weather or flying low.

The potential benefits of preventing all potential sightseeing accidents of a similar nature over the next 3 years totals \$36.8 million, with a present value of about \$32.2 million, of which \$13.7 million would be for the prevention of helicopter accidents and \$18.6 million would be for the prevention of airplane accidents.



rule. To determine if the rule will impose a significant cost impact on these small entities, the annualized cost must not exceed the annualized cost threshold established in FAA Order 2100.14A.

Small entities potentially affected by the final rule are small on-demand air tour operators in Hawaii using helicopter and fixed-wing aircraft. The FAA assumes that air tour operators will elect to have lifevests on board the helicopter rather than installing external flotation gear because the costs are dramatically lower. The FAA estimates that the annualized cost associated with acquiring lifevests for all helicopter occupants is about \$127 per seat. This estimate incorporates the cost of purchasing the lifevests, maintenance, and the associated weight penalty. Also, the FAA estimates that the annualized cost of the 1,500-foot minimum altitude requirement is about \$989 per seat. This cost incorporates the estimated lost profits for days when tour operations are prohibited due to inclement weather.

FAA Order 2100.14A defines small on-demand operators as those operating with a fleet of nine or fewer aircraft, which includes 37 (7 fixed-wing and 30 helicopter) of the 38 air tour operators in Hawaii. The annualized cost threshold for small operators is \$4,700 in 1994 dollars. The FAA has determined that the final rule will have a significant economic effect on 6 of the 7 fixed-wing air tour operators and 25 of the 30 affected helicopter air tour operators. The final rule will impose costs greater than the annualized cost threshold of \$4,700 for all affected operators except for six of the small air tour operators.

Due to the significant economic impact of the final rule on a substantial number of small entities, the FAA examined an alternative minimum altitude requirement for the affected operators. The FAA evaluated various minimum altitude requirements including 500, 800, and 1,000 feet so as to reduce the annualized cost of the final rule on individual operators. The FAA has determined that a minimum altitude requirement of 500 feet will be necessary to lower the annualized cost of the final rule below the \$4,700 threshold for most air tour operators. (Under § 91.155, pilots conducting VFR flights more than 1,200 feet above the surface in class G airspace must maintain a 500-foot vertical clearance below the clouds. Pilots operating VFR in class G airspace 1,200 feet or less above the surface must remain clear of clouds.) The FAA estimates that the annualized cost of a 500-foot minimum altitude requirement is about \$81 per seat. Including the cost of the lifevests, the FAA has determined that the combined cost of the lifevests and the alternative requirement for a 500-foot minimum altitude will lower the annualized cost below the \$4,700 threshold for all fixed-wing air tour operators and 26 of the 30 helicopter air tour operators.

The FAA has evaluated the level of safety for the 1,500-foot minimum altitude requirement in the final rule and that provided by a 500-foot minimum altitude requirement. Although the 1,500-foot minimum altitude requirement has a significant economic impact on a substantial number of small entities, it provides operational safety superior to that provided by a 500-foot minimum altitude and is necessary in the public interest. With the 1,500-foot minimum altitude, fixed-wing aircraft and helicopters have a longer power off gliding time, and the pilots are better able to select a suitable landing area in the event of a power failure. Hawaii's unique topography often complicates access to suitable emergency landing areas. The air tour accidents in Hawaii have been characterized by insufficient time for pilots to locate suitable landing areas after engine power loss or other problems leading to accidents. Therefore, the additional safety margins at the 1,500-foot minimum altitude should be provided when conducting passenger flights.

The FAA is implementing this emergency final rule due to the recent escalation of fatal air tour accidents. Despite voluntary measures, the cooperation of the Hawaii air tour operators, and the FAA's inspections, the accident data show that voluntary measures and existing regulations are insufficient to ensure safe air tour operations in Hawaii. The recent accidents discussed above indicate an urgent safety problem that cannot be adequately addressed solely by enforcement of existing regulations. For this reason, I find that notice and public procedure are impracticable and contrary to the public interest. However, interested persons are invited to submit such comments as they desire regarding this SFAR. Communications should identify the docket number and be submitted in triplicate to the Rules Docket address noted above. All communications received on or before the close of the comment period will be considered by the Administrator, and this SFAR may be changed in light of the comments received. All comments will be available, both before and after the closing dates for comments, in the Rules Docket for examination by interested parties.

### **International Civil Aviation Organization and Joint Aviation Regulations**

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with the Standards and Recommended Practices of the International Civil Aviation Organization to the maximum extent practicable. The FAA is not aware of any differences that this amendment will present.

### **Federalism Implications**

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this regulation will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

### **Conclusion**

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this regulation is a significant regulatory action under Executive Order 12866. In addition, the FAA certifies that this regulation will have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This regulation is considered significant under DOT Regulatory Policies and Procedures. A final regulatory evaluation of the regulation, including a Regulatory Flexibility Determination and Trade Impact Analysis, has been placed in the docket. A copy may be obtained by contacting the person identified under "FOR FURTHER INFORMATION CONTACT."

### **The Amendment**

In consideration of the foregoing, the Federal Aviation Administration amends parts 91 and 135 of the Federal Aviation Regulations (14 CFR parts 91 and 135) effective October 26, 1994.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. app. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31,

(Published in 60 FR 65832, December 20, 1995)

**SUMMARY:** This rule requires certain commuter operators that now conduct operations under part 135 to conduct those operations under part 121. The commuter operators affected are those conducting scheduled passenger-carrying operations in airplanes that have passenger-seating configurations of 10 to 30 seats (excluding any crewmember seat) and those conducting scheduled passenger-carrying operations in turbojet airplanes regardless of seating configuration. The rule revises the requirements concerning operating certificates and operations specifications for all part 121, 125, and 135 certificate holders. The rule also requires certain management officials for all certificate holders under parts 121 and 135. The rule is intended to increase safety in scheduled passenger-carrying operations and to clarify, update, and consolidate the certification and operations requirements for persons who transport passengers or property by air for compensation or hire.

**NOTE:** Please refer to Preamble to 91-245 for entire preamble.

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[(b) Flights conducted in gliders or hot air balloons.]

*Section 2. Definitions.* For the purposes of this SFAR:

“Air tour” means any sightseeing flight conducted under visual flight rules in an airplane or helicopter for compensation or hire.

“Air tour operator” means any person who conducts an air tour.

*Section 3. Helicopter flotation equipment.* No person may conduct an air tour in Hawaii in a single-engine helicopter beyond the shore of any island, regardless of whether the helicopter is within gliding distance of the shore, unless:

(a) The helicopter is amphibious or is equipped with floats adequate to accomplish a safe emergency ditching and approved flotation gear is easily accessible for each occupant; or

(b) Each person on board the helicopter is wearing approved flotation gear.

*Section 4. Helicopter performance plan.* Each operator must complete a performance plan before each helicopter air tour flight. The performance plan must be based on the information in the Rotorcraft Flight Manual (RFM), considering the maximum density altitude for which the operation is planned for the flight to determine the following:

(a) Maximum gross weight and center of gravity (CG) limitations for hovering in ground effect;

(b) Maximum gross weight and CG limitations for hovering out of ground effect; and

(c) Maximum combination of weight, altitude, and temperature for which height-velocity information in the RFM is valid.

The pilot in command (PIC) must comply with the performance plan.

*Section 5. Helicopter operating limitations.* Except for approach to and transition from a hover, the PIC shall operate the helicopter at a combination of height and forward speed (including hover) that would permit a safe landing in event of engine power loss, in accordance with the height-speed envelope for that helicopter under current weight and aircraft altitude.

*Section 6. Minimum flight altitudes.* Except when necessary for takeoff and landing, or operating in compliance with an air traffic control clearance, or as otherwise authorized by the Administrator, no person may conduct an air tour in Hawaii:

(a) Below an altitude of 1,500 feet above the surface over all areas of the State of Hawaii, and

(b) Closer than 1,500 feet to any person or property; or

(c) Below any altitude prescribed by federal statute or regulation.

*Section 7. Passenger briefing.* Before takeoff, each PIC of an air tour flight in Hawaii with a flight segment beyond the ocean shore of any island shall ensure that each passenger has been briefed on the following, in addition to requirements set forth in [14 CFR 91.107, 121, 571, or 135.117:]

(a) Water ditching procedures;

(b) Use of required flotation equipment; and



**SUMMARY:** This action prohibits flight operations within the territory and airspace of Iraq by any United States air carrier or commercial operator, by any person exercising the privileges of an airman certificate issued by the FAA except persons operating U.S.-registered aircraft for a foreign air carrier, or by an operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. Recently heightened tensions and instability in Iraq resulting from the actions of the Iraqi government have increased the threat of harm to U.S. operators and civil aircraft operating in this area. Therefore, this action is taken to prevent an undue hazard as a result of the threat to persons and U.S.-registered aircraft overflying the area.

**DATES:** This SFAR is effective October 9, 1996, and shall remain in effect until further notice.

**FOR FURTHER INFORMATION CONTACT:** Mark W. Bury, International Affairs and Legal Policy Staff (AGC-7), Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3515.

#### **SUPPLEMENTARY INFORMATION:**

##### **Availability of Document**

An electronic copy of this document may be downloaded using a modem and suitable communications software from the FAA regulations section of the Fedworld electronic bulletin board service (telephone: 703-321-3339), the *Federal Register's* electronic bulletin board service (telephone: 202-512-1661), or the FAA's Aviation Rulemaking Advisory Committee Bulletin Board service (telephone: 202-267-5948).

Internet users may reach the FAA's web page at <http://www.faa.gov> or the *Federal Register's* web page at [http://www.access.gpo.gov/su\\_docs](http://www.access.gpo.gov/su_docs) for access to recently published rulemaking documents.

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Rulemaking (ARM-1), 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-9680. Communications must identify the SFAR number or docket number of this action.

Persons interested in being placed on a mailing list for future rules should also request a copy of Advisory Circular No. 11-2A, which describes the application procedure.

##### **Background**

The Federal Aviation Administration (FAA) is responsible for the safety of flight in the United States and for the safety of U.S.-registered aircraft and U.S. operators throughout the world. Section 40101(d)(1) of Title 49, United States Code, requires the Administrator of the FAA to consider the regulation of air commerce in a manner that best promotes safety and fulfills the requirements of national security as being in the public interest. Section 44701(a) of Title 49, United States Code, provides the FAA with broad authority to carry out this policy by prescribing regulations governing the practices, methods, and procedures necessary to ensure safety in air commerce. In addition, 49 U.S.C. 40105(b)(1)(A) requires the Administrator to exercise his authority consistently with the obligations of the United States Government under an international agreement.

The FAA also has published a Notice to Airmen (NOTAM) advising of no-fly zones established by the United States and its coalition allies. The no-fly zones cover Iraqi territorial airspace north of 36 degrees north latitude and south of 33 degrees north latitude. The no-fly zones may be entered by aircraft only in accordance with the procedures established by the U.S. and its coalition allies, as described in the NOTAM.

The FAA has determined that the recently heightened tensions and instability in Iraq resulting from the actions of the Iraqi government have increased the threat to civil aircraft. The military situation in Iraq is tense after Iraqi attacks in Kurdish areas north of the 36th parallel (the boundary of the northern no-fly zone in Iraq) and the shift of the southern no-fly zone boundary from the 32nd to the 33rd parallel. On September 3, 1996, Iraqi President Saddam Hussein urged his air defense forces to ignore both the southern and northern no-fly zones and attack "any air target of the aggressors." This threat was not limited specifically to the aircraft of the U.S. military and the coalition forces. The threat could also apply to any civilian aircraft that might attempt to enter the area.

Even after the 1991 Gulf War, the Iraqi military still possesses a wide range of sophisticated weapons that potentially could be used to attack civil aviation aircraft overflying Iraq at cruising altitudes. These weapons include Russian- and French-made fighter and attack aircraft armed with cannons and air-to-air missiles, as well as Russian surface-to-air missile systems. The partially rebuilt integrated air defense command and control system combines early warning radars and visual observers with the sophisticated weapons.

These circumstances justify the imposition of certain additional measures to ensure the safety of U.S.-registered aircraft and operators that are conducting flight operations in the vicinity of Iraqi territory and airspace.

#### **Prohibition Against Certain Flights Within the Territory and Airspace of Iraq**

On the basis of the above information, and in furtherance of my responsibilities to promote the safety of flight of civil aircraft in air commerce, I have determined that immediate action by the FAA is required to prevent the potential injury or loss of certain U.S.-registered aircraft and U.S. operators conducting flights in the vicinity of Iraq. I find that the circumstances surrounding the recently heightened tensions and instability in and around Iraq and the actions of the Iraqi military, as described above, present an immediate hazard to the operation of civil aircraft in the territory and airspace of Iraq. Accordingly, I am ordering a prohibition of flight operations within the territory and airspace of Iraq by any United States carrier or commercial operator, by any person exercising the privileges of an airman certificate issued by the FAA except persons operating U.S.-registered aircraft for a foreign air carrier, or by an operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. This action is necessary to prevent an undue hazard to U.S.-registered aircraft and to protect persons on board that aircraft. Operations approved by the Administrator or by another agency of the United States Government and certain emergency operations shall be excepted from the prohibition.

Because the circumstances described in this notice warrant immediate action by the FAA to maintain the safety of flight, I also find that notice and public comment under 5 U.S.C. 553(b) are impracticable and contrary to the public interest. Further, I find that good cause exists for making this rule effective immediately upon issuance. I also find that this action is fully consistent with my obligations under 49 U.S.C. 40105(b)(1)(A) to ensure that I exercise



This regulation will generate potential benefits in the form of ensuring that the current acceptable level of safety continues for U.S. commercial air carriers and other operators. The potential benefits of this action will accrue only to those air carriers and other operators currently engaging in overflights of Iraqi territory; however, the FAA believes that there are no carriers currently engaged in commercial revenue operations over Iraq.

#### *Costs*

The SFAR will impose a potential incremental cost of compliance in the form of the circumnavigation (including the additional time for preflight planning) of Iraqi territory and airspace. The FAA believes that there are no U.S. air carriers or commercial operators currently conducting revenue flights over Iraq. However, if there are affected carriers, the FAA seeks comments on the economic effects of this rule.

#### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by Federal regulations. The RFA requires a Regulatory Flexibility Analysis if a proposed rule would have "significant economic impact on a substantial number of small entities." FAA Order 2100.14A outlines the FAA's procedures and criteria for implementing the RFA. The FAA believes that there are no U.S. air carriers affected by this SFAR and therefore no "small entities" affected as defined by FAA Order 2100.14A. Thus, the SFAR would not impose a "significant economic impact on a substantial number of small entities."

#### **Paperwork Reduction Act**

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3507 *et seq.*).

#### **International Trade Impact Assessment**

This final rule could have an impact on the international flights of U.S. air carriers or commercial operators because it will restrict their ability to overfly the territory of Iraq and therefore may impose additional costs relating to the circumnavigation of Iraq's territorial airspace. This final rule, however, will not restrict the ability of foreign air carriers to overfly Iraqi territory. Given the narrow scope of this rule, it will not eliminate existing or create additional barriers to the sale of foreign aviation products in the United States or to the sale of U.S. aviation products and services in foreign countries.

#### **Federalism Determination**

The SFAR set forth herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612 (52 FR 41685; October 30, 1987), it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

#### **Conclusion**

For the reasons set forth above, the FAA has determined that this action is a "significant regulatory action" under Executive Order 12866. This action is considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). The FAA

part 91 effective October 9, 1996.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 USC 106(g), 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46502, 46504, 46506–46507, 47122, 47508, 47528–47531.

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(2) operators of aircraft registered in the United States except where the operator of such aircraft is a foreign air carrier.

【2. *Flight prohibition.* Except as provided in paragraphs 3 and 4 of this SFAR, no person described in paragraph 1 may conduct flight operations over or within the territory and airspace of Iraq.

【3. *Permitted operations.* This SFAR does not prohibit persons described in paragraph 1 from conducting flight operations over or within the territory and airspace of Iraq where such operations are authorized either by exemption issued by the Administrator or by another agency of the United States Government.

【4. *Emergency situations.* In an emergency that requires immediate decision and action for the safety of the flight, the pilot in command of an aircraft may deviate from this SFAR to the extent required by that emergency. Except for U.S. air carriers or commercial operators that are subject to the requirements of 14 CFR parts 119, 121, or 135, each person who deviates from this rule shall, within ten (10) days of the deviation, excluding Saturdays, Sundays, and Federal holidays, submit to the nearest FAA Flight Standards District Office a complete report of the operations of the aircraft involved in the deviation including a description of the deviation and the reasons therefore.

【5. *Expiration.* This Special Federal Aviation Regulation will remain in effect until further notice.】

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**SUMMARY:** This action establishes a temporary Special Federal Aviation Regulation (SFAR) at Rocky Mountain National Park (RMNP) to preserve the natural enjoyment of visitors to RMNP by preventing any potential adverse noise impact from aircraft-based sightseeing overflights. This action temporarily bans commercial air tour operations over RMNP while the FAA develops a broader rule that will apply to RMNP as well as other units of the National Park system. The final rule will expire as soon as a general rule on such overflights is adopted.

**FOR FURTHER INFORMATION CONTACT:** Neil Saunders, Airspace and Rules Division (ATA-400), Air Traffic Airspace Management, Federal Aviation Administration, 800 Independence Avenue, SW, Washington, DC 20591; telephone (202) 267-8783. For the Final Environmental Assessment and Finding of No Significant Impact, contact Mr. William J. Marx, Manager, Environmental Programs Division (ATA-300), Office of Air Traffic Airspace Management, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3075.

## **SUPPLEMENTARY INFORMATION:**

### **Availability of the Final Rule**

Any person may obtain a copy of this final rule by submitting a request to the Federal Aviation Administration, Office of Rulemaking (ARM-1), 800 Independence Avenue, SW, Washington, DC 20591, or by calling (202) 267-9677. Communications must identify the amendment number of this final rule.

### **Background**

The designation of an area as a National Park is one of the highest recognition given to any area in the country for its natural beauty and the importance of its protection. In view of the significance of this designation, Congress requires that National Parks be managed consistently with the "high public value and integrity of the National Park System and [such management] shall not be exercised in derogation of the values and purposes for which these areas have been established to conserve the scenery and the nature and the historic objects and the wildlife therein, and to leave them unimpaired for future generations." Organic Act, 16 U.S.C. § 1a-1; 16 U.S.C. 273-273d, 273f. The National Park Service ("NPS") and the Federal Aviation Administration ("FAA") recognize that noise from aircraft may interfere with the natural park experience for visitors on the ground and with efforts to preserve these and other park values.

On December 22, 1993, the Department of the Interior and the Department of Transportation joined to form an interagency working group ("IWG") with the objective of protecting National Parks from the adverse effects due to excessive aircraft noise. The IWG's tasks included reviewing the environmental and safety concerns caused by park overflights, and working towards resolution of impacts on specific parks.

The FAA's role in the IWG is to ensure the maintenance of aviation safety and provide for the safe and efficient use of airspace, while working with the Department of the Interior to achieve its role in the IWG to protect public land resources in the national park system, preserve environmental values for those areas, and provide for the public enjoyment of those areas.

## FAA Statutory Authority

The FAA has broad authority and responsibility to regulate the operation of aircraft and the use of the navigable airspace and to establish safety standards for and regulate the certification of airmen, aircraft, and air carriers. 49 U.S.C. 40104, *et seq.*, 49 U.S.C. 40103(b). Subtitle VII of Title 49 U.S.C. provides guidance to the Administrator in carrying out this responsibility. However, the FAA's authority is not limited to regulation for aviation safety and efficiency.

The FAA has authority to manage the navigable airspace to protect persons and property on the ground. The Administrator is authorized to "prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes) for . . . (B) protecting individuals and property on the ground" 49 USC 40103(b)(2). In addition, under 49 USC Section 44715(a) the Administrator of the FAA, in consultation with the Environmental Protection Agency, is directed to issue such regulations as the FAA may find necessary to control and abate aircraft noise and sonic boom to "relieve and protect the public health and welfare."

The FAA construes these provisions, taken together, to authorize the adoption of this regulation, which is intended to minimize or limit the adverse effects of aircraft noise to protect visitor enjoyment of RMNP. The FAA finds that the regulation of the navigable airspace, as authorized under 49 U.S.C. 40103(b)(2), is necessary, on a temporary, limited basis, as discussed below, to control and abate aircraft noise at RMNP under 49 U.S.C. 44715. Current policies support the exercise of FAA authority to protect the RMNP in these unique circumstances, at least as an interim step while the FAA proceeds to complete a rulemaking that will address the larger issue of protecting national parks. See generally, Section 101 of the National Environmental Policy Act of 1969, as amended 42 U.S.C. 4321 and Executive Order 11514, as amended by Executive Order 11991.

### Rocky Mountain National Park

RMNP receives approximately three million visitors a year, making it the sixth most visited national park in the United States, despite its relatively small size (for a major Western national park) of 265,727 acres. RMNP is located approximately 40 miles outside the city limits of Denver, Colorado, and approximately 50 miles from the Denver International Airport. The topography of the park is characterized by steep mountains, narrow valleys, and high elevations (8,000 to 14,250 ft). Seventy percent of park terrain is above 10,000 feet. In fact, excluding Hawaii and Alaska, RMNP has the highest percentage of mountainous elevations above 10,000 feet, compared to any other national park.

RMNP presents pilots with a challenging flying environment. It has high winds, often in excess of 100 mph. The Park's high altitudes diminish engine performance and propeller efficiency, making it more difficult for an aircraft to perform in high winds. The rugged terrain limits maneuverability, and the rapidly changing weather can unexpectedly envelop an aircraft. Perhaps in part for these reasons, the use of the airspace over RMNP for commercial air tour operations has so far not been extensive. Unlike many other national parks, there are currently no air tour operators overflying the park or operating in the surrounding airspace. However, other aviation users do operate in the airspace above RMNP. Due to the Park's proximity to the Denver International Airport, aircraft operating to or from the airport overfly RMNP. Arrival and departure routes above the Park are necessary to ensure the safe and efficient handling of air traffic into the airport. Traffic into the airport operates at minimum altitudes of 19,000 feet above mean sea level (MSL) for jets and 16,000 feet above MSL for turboprop aircraft. Non-commercial general aviation aircraft also overfly the Park. While

tion System and is required by law to be managed by the National Park Service as a de facto wilderness until action is taken by Congress. This means that, among other things, most motorized vehicles must be contained within the existing roadway system, and future development is limited.

The Governor of Colorado, members of the Colorado Congressional delegation, and other officials have requested the Department of Transportation to place a preemptive ban on commercial air tour operations at RMNP. Even though there are no commercial air tour operations at the Park currently, some operators have expressed an interest in starting commercial air tours to officials of Estes Park, Colorado and to the NPS. The government officials who have requested regulatory action are concerned that an influx of commercial air tour operations at RMNP would undermine the enjoyment of the Park by visitors on the ground.

The FAA wishes to be responsive to concerns about the effects of overflights on the national park system. Although the FAA is still developing nationwide standards for overflights of national parks, a relatively unusual set of circumstances has occurred at RMNP. Judging from the requests received by the FAA, there is broad support to protect the park environment by a ban on overflights among local leaders, even in the absence of current commercial air tour overflights. In addition, the FAA acknowledges the value in being able to take the initiative now, before any commercial overflights occur. At this point, there has been no environmental loss from commercial air tour overflights, and a temporary ban on such flights will cause no economic loss to any incumbent operator.

This temporary Special Federal Aviation Regulation will expire as soon as a general rule on overflights over the national park system is adopted. The FAA and DOI will be collecting quantitative data in conjunction with the development of this broader rule that will apply to all units of the National Park System.

Within 24 months of the effective date of this temporary ban, the FAA, in conjunction with the NPS, will complete a review of this temporary ban on commercial air tour operations over RMNP and publish its findings in the *Federal Register*. The FAA will determine whether the ban continues to be necessary to meet the objectives of the FAA and NPS. This review will consider any data collected during the development of the broader rule, as well as any other additional data that could be relevant to the temporary ban. The FAA also will consider any new issues relevant to RMNP that may have arisen, the effect of the temporary ban on the benefits of the park experience, including natural quiet, and any unanticipated burden the ban may have imposed on the air tour industry.

## **Discussion of Comments**

### *A. Introduction*

On May 15, 1996 (61 FR 24582), the FAA published an NPRM proposing several alternative methods of preserving the natural park experience of Rocky Mountain National Park by imposing restrictions on commercial aircraft-based sightseeing overflights. Commenters were invited to address three alternatives: (1) A total ban; (2) limits on operations, and (3) a voluntary agreement. As of September 1, 1996, the FAA received 4,527 comments from individuals, air tour operators from other geographic locations, environmental and civic organizations, state and local governments, and groups representing the interests of various segments of aviation. The overwhelming majority of these commenters favor Alternative One, a ban on overflights of RMNP, while a minority of commenters, virtually all representing aviation interests (e.g., National Air Transport Association (NATA), Airline Owners and Pilots Association (AOPA), and Helicopter Association

A summary of the views presented by the commenters follows. First, the general issues raised by the commenters are discussed. Second, the three alternatives included in the NPRM are explained and commenters' arguments supporting and opposing each alternative are summarized.

## *B. General Issues Raised by Commenters*

### *1. FAA Authority and Procedural Rules*

Helicopter Association International (HAI) (comment 4357) states that this NPRM does not cite a statutory basis for the proposed action, but if the basis is 49 U.S.C. 44715, the FAA failed to consult the Environmental Protection Agency (EPA). HAI also states that the NPRM exceeds the mandate of Congress as stated in Public Law 100-91 to "provide for the substantial restoration of the natural quiet and experience of the park and protection of public health and safety from adverse effects associated with aircraft overflight in the Grand Canyon National Park." The primary concern of HAI is that there is no Congressional mandate to restore the natural quiet in the RMNP. Additionally, HAI claims that the NPRM is not in compliance with the Administrative Procedure Act, in that the NPRM is not informative enough to allow a concerned party the opportunity to comment appropriately, is not promulgated on the basis of safety, but on the unsubstantiated and subjective environmental impacts of future overflights, and is not in compliance with the FAA's own procedural requirements in Title 14 of the Code of Federal Regulations (14 CFR) part 11.65. HAI also cites the lack of an Environmental Impact Statement (EIS).

National Air Transport Association (NATA) (comment 4229) states that this NPRM allows federal land management agencies like the NPS to "effectively usurp FAA jurisdiction over air traffic and airspace itself" which is contrary to the Federal Aviation Act of 1958 that "... specifically charge[d] the FAA with assuring safety and fostering the development of air commerce." NATA and HAI state that this NPRM represents an undue threat to the public right of transit through the navigable airspace of the U.S. as provided for in Section 104 of the Federal Aviation Act. For the FAA to propose such a rulemaking would be to remove its authority to promote air commerce and safety, which would be "an incomprehensible dereliction of responsibility," in NATA's opinion.

The United States Air Tour Association (USATA) (comment 4563) states that the FAA fails to cite the statutory authority for the rulemaking, which it suggests is a tacit indication that the FAA does not have the requisite statutory authority to enact the rules put forth in the NPRM.

The Colorado Pilots Association, Inc. (comment 4429) states that the proposed ban would act as an unreasonable interference with interstate and intrastate commerce.

The National Association of State Aviation Officials (NASAO) (comment 4433) points out in a resolution issued at its Washington conference on March 10, 1996, that the proposed rule would give the NPS authority to direct the FAA in the use of the national airspace, which would be interfering with the FAA's mandate under Federal law.

Southwest Safaris (comment 4583) comments that the FAA does not have the regulatory power, as determined by Congress, to regulate that which does not exist. This commenter adds that the FAA was mandated by Congress to foster and promote the growth of commercial aviation, not to "regulate it out of existence" and that if the NPRM is implemented, commercial



and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations" (16 U.S.C. 1). This commenter contends that regulating overflights over the RMNP does nothing to maintain the objectives listed above.

In contrast, the Sierra Club/Grand Canyon Chapter (comment 2035) and the Citizens for Aircraft Noise Abatement/Sedona (CANA/S) (comment 4227) contend that natural quiet has been identified by the Park Service as a resource, citing the National Park Service Organic Act, as amended by the Redwoods Act of 1978, that defines resource preservation as the primary goal of the national parks. In addition, these commenters cite the Wilderness Act of 1964, which was enacted to protect the "primeval character" of designated lands and to provide "outstanding opportunities for solitude."

The Utah Air Travel Commission (comment 1113) oppose the NPRM because it questions the thoroughness and completeness of the scientific basis of the NPS's Report to Congress, in which aircraft noise alone was singled out as obtrusive, making this report both incomplete and biased. This commenter believes a new study is required, complete with the identification of all obtrusive noise source, before further regulation of park airspace is enacted. In addition, this operations of national parks may violate the Americans with Disabilities Act. This commenter is also concerned with the unconditional restriction imposed on aircraft due to noise, and asks if silent engines of the future will still be restricted.

The Utah Air Travel Commission also cites the conclusion of a study, Tour Passenger Survey Results, that the NPS considered biased because it was a survey of air tour passengers. The Commission believes that while the study may be incomplete, it does not recommend the elimination of park overflights; rather, it identifies the major value of overflights. This, in the commenter's opinion, indicates that no further regulation of overflights is warranted or needed.

## 2. Lack of Safety Justification For Any Rulemaking

The HAI (comment 4357) opposed the NPRM because there are no studies stating that the proposed rules will promote aviation safety or protect the environment and there has been no research conducted stating that health issues will be advanced.

The Montana Department of Transportation (comment 4349) asserts that aircraft overflights do not damage scenery, natural and historical objects or wildlife in the parks. Therefore, this commenter opposes this NPRM as it believes that "all categories of aviation are already regulated by the use of navigable airspace for all respective flight activities at this time."

The Colorado Pilots Association, Inc. (comment 4429) states that the proposed ban is unnecessary because aerial tours do not operate over RMNP for obvious reasons: the high altitudes of the park; aircraft loading factors; and the attendant operating costs associated with running successful aerial tour operations. Thus, "it is inappropriate to restrict an activity that is unlikely to ever occur."

Geo-Seis (comment 4350), a part 135 certificate holder and provider of certain air tour operations in various parts of the U.S., opposes the NPRM, contending that "while no specific plans currently exist, [it] is an operator that is contemplating operations in the RMNP," especially given the close proximity of its offices to the Park and the type of helicopters this company operates. This commenter asserts that since it operates high altitude helicopters with an excellent safety record, it requests the FAA to reconsider prohibiting helicopter operations in the RMNP in the future.

by persons other than those engaged in for-hire sightseeing service because "there is no substantial evidence of significant noise impact on park area from normal (non-sightseeing) overflights by general aviation aircraft." Each of these commenters are wary of the implications of the NPRM based on the Grand Canyon National Park Rule, that is their opinion, are inherently discriminatory towards general aviation. AOPA (comment 4356) contends that due to the Grand Canyon National Park Rule, general aviation is required to fly higher altitudes than air tour operators, even though it constitutes very little transient traffic, as opposed to the thousands of overflights conducted by air tour operators. A similar point is made by NASAO (comment 4433). Several of the commenters point out that general aviation does not disturb the natural quiet of RMNP, and the current voluntary overflight altitude of 2,000 feet is one result of voluntary cooperation.

The Grand Canyon Air Tour Council (comment 2006) comments that the RMNP proposal is not separable from the FAA's and the Department of the Interior's project to develop national standards that will attempt to regulate all air traffic over all national parks and other possible federal land, and states that the broader issue "needs to be brought into the public domain for proper viewing." The council recommends a voluntary agreement until the debate on national standards for park overflights is available for national scrutiny.

AOPA (comment 4356) opposes any altitude restrictions for general aviation over RMNP. It asserts that general aviation does not disturb the natural quiet of the RMNP, and the current voluntary overflight altitude of 2,000 feet has served well to negate the potential impact of general aviation overflights.

#### 4. Economic Considerations

Since there are no operators currently performing sightseeing air tour operations over RMNP, the FAA in the NPRM determined that the expected impact of this regulatory action is negligible and that this proposed amendment would not have a significant impact on a substantial number of small entities. Since operators may be considering starting these types of operations over the park in the future, the FAA asked for comment on whether any person intends to institute commercial sightseeing operations at RMNP.

HAI (comment 4357) disagrees with the rationale that there was no need to conduct a regulatory impact analysis because "there are no operators currently performing sightseeing air tour operators over RMNP, therefore the regulatory impact is negligible." HAI states that it is incumbent upon the FAA that an analysis of the future impact of this rule be conducted.

The Grand Canyon Air Tour Council (comment 2006) claims that the cost issue is not fully considered by the FAA. This commenter asserts that if the FAA can use a potential noise issue to justify its proposal it can use potential air tour operation in determining what is and what is not a cost on society. It recommends that the FAA: (1) Assess the monetary value of the RMNP's worth to society; (2) examine the potential revenue that could be appropriately generated through present and future business development (including air tours); and (3) develop a financial mode that would attempt to ascertain cost to society versus other values, e.g., the opportunity to see the seventy percent of the RMNP terrain that is above 10,000 feet.

The Grand Canyon Air Tour Council further asserts that it is very difficult to comprehend how the FAA concluded in the Regulatory Evaluation section that "this rule would not have a significant impact on a substantial number of small entities and would not constitute a barrier to international trade." The council states that the majority of air tour operators fall

aircraft technology and how it can be used as a noise reduction methodology. For example, in a 1994 report to Congress, the NPS recommended the use of quiet aircraft technology as a means to reduce the noise effect on National Parks.

### *C. Proposed Alternatives*

The NPRM outlined three alternative methods of preserving the natural enjoyment at RMNP and requested specific comments on how such agreements could be handled. Alternative One would ban commercial aviation sightseeing tours in the vicinity of RMNP. Alternative Two would allow commercial sightseeing tours, but would restrict the operations to routes that would be restricted to minimum altitudes and would follow the existing road system, among other restrictions. Variations of this alternative were presented in the NPRM. Alternative Three would call for voluntary agreements between air tour operators and the NPS.

Since there were no air tour operators conducting overflights at the time the NPRM was proposed, the three proposed alternatives were an attempt to provide a fair representation of the possible ways to mitigate the predicted effect of aircraft noise generated by future air tour operators. Using the alternatives, which included suggestions ranging from the maintenance of the status quo through the use of voluntary agreements and restrictions on time, season, and altitudes, to a complete ban on all future air tour operations, the FAA made an informed decision. After considering the public policy favoring the preservation of the natural enjoyment of our National Parks, the strong demand from Colorado residents to ban commercial air tour overflights, the special situation and unique features of RMNP, and the numerous comments and alternatives, the FAA concluded that a ban on commercial air tour operations over RMNP will ultimately inure to the benefit of all. In effect, the ban will operate to preserve the status quo, because there are currently no commercial air tour operations at RMNP. The ban clearly protects the enjoyment of the park while avoiding the imposition of restrictions that would result in a less than meaningful opportunity for commercial air tours to operate over RMNP.

#### *1. Alternative One—Ban Sightseeing Tours*

a. *Support.* The majority of commenters (99 percent) support a ban on commercial aviation sightseeing tours. Most of these commenters are individuals who live near the park and/or have visited the park. Organizations that support a ban include: CANA/S, Sierra Club, NPCA, Wilderness Land Trust, League of Women Voters, Town of Estes Park, Estes Valley Improvement Association, Inc., Larimer County Board of County Commissioners, The Wilderness Society, and other local governmental and non-governmental organizations. Reasons that commenters give for supporting the ban include:

(i) *Preserve the Natural Enjoyment of the Park.* Commenters stress that the total ban would preserve the natural enjoyment and tranquillity of the park, which is what visitors value most in their national park experience. Some commenters cite statistics. e.g., 96 percent of park visitors value tranquillity, and 81 percent of park visitors are directly opposed to tour overflights. Some commenters point out that most of the park's visitors come from urban areas and are seeking the peace and quiet offered by the park. Others point out that the original purpose of national parks and wilderness areas was to provide this natural tranquillity and that overflights would destroy this objective.

Commenters assert that the allowance of overflights at other national parks (e.g., Grand Canyon National Park) has resulted in unacceptable noise levels which spoil the experience of park visitors. For example, commenter #2698 says that commercial sightseeing tours in

One from Department of Agriculture, Secretary Dan Glickman, to Department of Transportation, Secretary Federico Peña (dated July 31, 1996); and the other from the Forest Service Chief Jack Ward Thomas to Secretary Glickman (dated April 11, 1996): "We believe that commercial helicopter flights over wildernesses are inconsistent with the values for which these areas were established by Congress."

Estes Valley Improvement Association (comment 155) claims that tour operations would shatter the silences in the RMNP "bowl of a valley." It is this commenter's belief that because the air is thin in this area, larger and stronger helicopter engines would be necessary. This would result in unendurable noise in the valley, thereby negatively impacting the ground tourism as well as the quality of life for the residents of the area.

The NPCA (comment 3634) states that, unlike commercial passenger jets and general aviation operations, commercial air tour operations are characterized by frequent, low-altitude flying to maximize contact with scenic points of interest. From the perspective of NPCA's members, this impacts on the park visitor's experience and the preservation of natural quiet.

(ii) *Safety*. Estes Valley Improvement Association (comment 155) cites the danger that tour operators would put themselves in by flying in an area known for extreme variations in weather, as sudden storms are common in the Great Divide and have been known to destroy airplanes. This, in turn, is a great source of danger for helicopters, people on the ground, and rescue operations.

Another commenter (comment 1335), based on his experience as a park ranger at the RMNP, states that bursts of wind would prove difficult for piston-engine aircraft to maintain altitude, air speed, and control when operating in the "rarefied air of these altitudes" of the RMNP. Also, he comments that the terrain of the park is more vertical than horizontal and is not safe for the operation of any aircraft and that a further danger would be for rescue personnel and victims of an incident. He cites the specific example of a recent airplane accident on Mount Epsilon, where the plane exploded from impact on the mountainside; when the airplane and pilot were found, there was no safe way to retrieve the pilot's body due to the potential of avalanches caused by the perilous plane position on the snow cornices on top of the cliff.

One commenter asserts that Alternative One would ensure the safety of park visitors (passengers on overflights and visitors on the ground) by preventing flying in a potentially unsafe mountainous area with varying elevations and unpredictable weather conditions (e.g., quick-forming thunderstorms, strong mountain wave winds and accompanying turbulence). One commenter (comment 540) also asserts that the crash of any aircraft could likely ignite a catastrophic forest fire.

(iii) *Wildlife*. From an ecological standpoint, commenters 295 and 1335 assert that increased air traffic can affect animals in many negative ways: adversely affecting breeding behaviors of birds and mammals, interrupting nesting habits, and causing stress to certain species. Animals indigenous to these areas are apt to respond to this noise stress by either migrating from the area or simply dying off, unable to handle the stress to their natural habitat. In addition, there may be an increased danger from rock falls and avalanches. To this commenter, the most important issue is that the RMNP should serve as a tranquil refuge to the wildlife. Posing a similar ecological concern, a park ranger (comment 1335) mentions the greater pollution problem when dealing with airplane crashes, scattering fuel loads and airplane parts throughout the fragile tundra ecosystems, which require years to recover from such accidents.

tions Association (comment 237) states that there are no roads for car vans to accommodate them. The Wilderness Land Trust (comment 2027) similarly assert that there are opportunities to partake of the scenic vistas, making aviation sightseeing unnecessary.

Visitors who cannot or choose not to see the park on foot can already get a good view of the park and look down on the mountains by driving on one of the park's several roads (e.g., Trail Ridge Road) or by using the handicap accessible trails. Thus, overflights are unnecessary.

(v) *Cost.* CANA/S (comment 4227) states that the benefit (natural quiet for the vast majority of visitors and residents who value this resource) of Alternative One justifies its costs (a disappointed prospective air tour operator of some unknown time in the future). The same analysis applies to the option of maintaining the status quo (avoiding any additional expenses now), which according to this commenter does not "justify its costs (uncertainty about the advent of RMNP air tours, as well as the failure of FAA to address problems in their early or pre-existent stages, not to mention even higher expenses to solve problems retroactively)." The benefits of Alternatives Two and Three (economic transactions between the few and the fewer) do not justify their costs (shattered natural quiet for most individuals, and enormous governmental expenses for dealing with the problems).

(vi) *Other.* The Wilderness Society (comment 4457) states that, as has occurred at other national parks, correction of overflight problems will be virtually impossible once commercial flights have become established. Thus, FAA action is necessary to preclude the establishment of commercial air tour operations within RMNP and provide the highest degree of protection for the park's resources and visitors.

The Sierra Club, Grand Canyon Chapter (comment 2035) strongly supports Alternative One and adds the following recommendations: the rule should be implemented permanently; four bordering Congressionally designated wilderness areas should also be covered under this no-air-tour-flight rule, specifically, Comanche Peak, Indian Peak, Neota, and the Neversummer Wildernesses; general aviation should be subjected to the same rule as air tour operators, except that low altitude flights may be required for emergency purposes like search and rescue, fire-fighting, etc.; and the rule should apply to airspace adjacent to the protected areas as well.

b. *Oppose.* (i) *Air Transportation—Least Damaging.* Commenters such as the HAI (comment 4357) and Geo-Seis (comment 4350) claim that helicopters and other air tours are the most environmentally sound means to enjoy RMNP because, unlike those visitors on foot, the air tour visitors do not trample vegetation, disturb artifacts or leave behind any refuse. In addition, air tours do not require roads or other infrastructure development. More importantly, they provide a service to the handicapped and elderly, who would not otherwise be able to visit the park. Finally, these tours may fulfill the need to provide rescue and emergency airlift.

NATA (comment 4229) and HAI (comment 4357) state that these proposals are discriminatory in nature as no other modes of access to the Park have been proposed to be limited. NATA states that ground traffic "extol a much more tangible price on the natural beauty of the Park" while air tours "leave no residual effects within the Park that affect the enjoyment of the Park by persons on the ground."

(ii) *Temporary Ban While Studying.* NATA (comment 4229) notes that the idea behind the prohibition of all flights is to allow the FAA and NPS the opportunity to "study the situation and to develop a plan for controlling these overflights to minimize or eliminate their effect on park visitors on the ground." This commenter thinks that this alternative is counter-

19,000 feet on a daily basis at 19,000 and 16,000 feet above mean sea level (MSL). USATA says that these altitudes are less than 2,000 feet above the highest peaks and also adds that, since seventy percent of the park terrain at RMNP is 10,000 feet MSL, most of the general aviation aircraft currently flying through RMNP are following routes where the Park's peaks rise above these aircraft. USATA states that with numerous aircraft moving in, around and above RMNP, NPS officials, in discussions with the FAA, have found that these aircraft have not caused any serious noise problem. USATA believes that air tour aircraft are akin to general aviation aircraft and commercial overflights, and if used properly, would present negligible effects.

(iv) *Other.* Temsco Helicopters (comment 4575), an operator that conducts air tours in Alaska, says that prohibiting air tours would be discriminatory to air tour operators. This commenter also says that alternative one would create interpretation problems. For example, "are flights that are point to point but fly through RMNP air tours? Is a photo flight an air tour?"

## 2. Alternative Two—Permit Sightseeing tours with Limitations

a. *Support.* Geo-Seis (comment 4350) would support some time-specific restrictions under this option and suggests that the times be modified to parallel optimum flight conditions, which are primarily earlier in the mornings to mid-afternoon.

b. *Oppose.* (i) *Enforcement.* The Estes Valley Improvement Association (comment 155) claims that limiting operations is completely unsatisfactory primarily because of the inability of any agency to monitor this regulation. This commenter and others believe that the proposed requirement of flying 2,000 feet above ground-level is not practical or enforceable since the ground-level varies so drastically from 7,500 to 14,255 feet.

CANA/S (comment 4227) claims that the FAA's 2,000-foot above-ground-level guideline for flights over noise-sensitive areas is routinely ignored by air tour operators. In addition, HAI's flight guidelines are also often ignored.

An individual commenter (comment 325) says that a 2,000 ft. above ground level restriction is meaningless because "[o]ver much of the park's terrain hikers could throw rocks down on the occupants of a plane complying with the restriction." Also, seasonal restrictions are meaningless because the park is used year-round by skiers and others.

(ii) *Noise Issue.* Estes Valley Improvement Association (comment 155) states that since noise from aircraft reverberates all over the valley, this option to keep flying only over roads would not solve the reduction in noise issue, as this area is where the highest percentage of residents, visitors and lower groups of animals would be affected.

Similarly, CANA/S (comment 4227) adds, noise from aircraft flying at 2,100 feet above ground is, for all intents and purposes, indistinguishable from that at 2,000 feet. Therefore, this alternative and the voluntary agreement fail to address many aspects of the natural quiet equation. This commenter adds, according to NPS's 1992 *Aircraft Overflight Study: Effect of Aircraft Altitude upon Sound Levels at the Ground*, any doubling of flight altitude (say from 2,000 feet to 4,000 feet) would, based on divergence alone, result in only a 12 decibel reduction (NPS, page 3). This commenter contends that this may be helpful in the instance of already quiet aircraft, but loud aircraft would still shatter the quiet.

The Wilderness Society (comment 4457) states that the restrictions of Alternative Two would not eliminate the degradation of visitors' experiences. Routing flights over road corridors would mean that more visitors would be affected by the noise, and routing flights over

of restrictions. This commenter assumes that the basis for this action is to enhance the environment of the Park by visitors on the ground by limiting air tour operations during these periods. However, NATA asserts, no quantifiable data exists as to how limiting air access to the Park will enhance the experience of visitors on the ground. According to a survey of Park users conducted by the NPS, about 90 percent of the visitors to the Park stated that their enjoyment of the Park would be affected by helicopter noise. This commenter states that using this data to limit all overflight operations is ludicrous, and "the FAA cannot apply theoretical data to a nonexistent situation."

HAI (comment 4357) believes that this NPRM does not provide sufficient information for meaningful comment. For instance, no information on what routes are considered in Alternative Two was included and there are no maps or charts provided for an analysis of proposed routes. This lack of information makes it impossible to comment in detail.

(iv) Other. NPCA (comment 3634) states that, in a park environment that is totally free of commercial air tour activity, placing limitations on operations would invite the establishment of such activity. NPCA adds that any limit, less restrictive than a total and permanent ban, would result in the derogation of park values rather than any improvement of current conditions.

Temsco Helicopters (comment 4575), which supports alternative three, states that time and seasonal restrictions of alternative two would make any kind of air tour operation unworkable. For example, seasonal restrictions would make operations economically unfeasible and would close the park to one type or class of visitor for a portion of the year.

USATA (comment 4563) disapproves of imposing limits on the routes used by air tour aircraft and points out that the ability of these aircraft to operate away from populated areas is a positive factor. USATA states that air tours would cause the least amount of environmental damage to wilderness areas and would therefore be supporting the mission of the Wilderness Act to preserve the "primeval character and influence" of these areas.

USATA goes on to point out its difficulties with Variants A, B, and C. USATA says that the 2,000 feet AGL limitation of Variant A would be in effect a "one-size-fits-all" approach would could exacerbate the presence of sound from aircraft; this was the case in Haleakala National Park which was required to meet a 1,500 foot AGL minimum by SFAR 71. USATA also states that the time limitations of Variant B would be unreasonable because it would be impossible to present many of the wonders of the park in the absence of flight. Finally, USATA says that the seasonal limitations of Variant C would threaten the viability of air tour operations seeking to operate in RMNP because many of these companies would need to operate year round in order to stay in business.

### 3. Alternative 3—Voluntary Agreement

a. *Support.* The Grand Canyon Air Tour Council (comment 2006) contends that this is the only viable option. This commenter believes that a voluntary agreement is necessary, because such an agreement provides a solution "where no authority exists for effecting regulatory options (as in the case of this RMNP NPRM)." This commenter provides reasons why the other two alternatives are not acceptable: the disregard to the interests of the elderly and handicapped to have air tour availability in the RMNP, the lack of an Environmental Impact Statement prior to the implementation of the proposed SFAR, and the fact that this proposal is based on a request by Colorado's Governor, the Congressional delegation, and other officials from Colorado specifically, none of whom are the owners of this national park and do not represent a federal statutory authority nor a legislative mandate. Therefore, in this commenter's opinion, it "would appear incumbent upon the FAA to decide to proceed only with Alternative Three

Geo-Seis (comment 4350), an air tour operator, believes that given the personal preferences of paying customers on these flights and limitations on flights due to adverse weather conditions, voluntary and satisfactory operating agreements could easily be established with most operators.

AOPA (comment 4356) believes "cooperation between general aviation pilots and the NPS has always been a cornerstone of aviation's efforts to preserve the park experience of ground visitors. The current voluntary overflight altitude of 2,000 feet is one result of this cooperation."

USATA (comment 4563) supports the use of voluntary agreements and says that its organization would work with the FAA, NPS, and others in drafting a letter of agreement. The agreement should address these issues: (1) areas that would be covered, (2) possible restrictions and identities of the participants, (3) discussion on how an agreement would be implemented in the necessary time frame, (4) how an altitude restriction would be enforced, (5) suggested penalties for violations, and (6) the circumstances under which an agreement could be terminated.

b. *Oppose.* Many commenters say that voluntary compliance is unrealistic because operators would not voluntarily limit their own profits and because it would be difficult to enforce. For example, commenter #325 says that the park is sufficiently large to be a challenge to monitoring of compliance.

The Estes Valley Improvement Association (comment 155) believes that this proposal is completely unrealistic since, currently, operators do not exist in the RMNP, and no possible route of overflights could make tolerable the noise which would fill the Valley and the Park.

NPCA (comment 3634) states that voluntary agreements have a history of failure and cites the experience at Hawaii Volcanoes National Park where many operators, after having given verbal agreements to park management, backed away from written agreements for fear that a rogue operator would capitalize on non-compliance and seize market share. Similarly, the Wilderness Society (comment 4457) states that voluntary agreements have not successfully protected park resources and that violations occur for which the Park Service has no recourse.

On the NPRM's use of the Statue of Liberty and Jefferson National Expansion Memorial as examples of successful voluntary flight agreements, CANA/S (comment 4227) refutes the ability of the FAA to use them as examples. These locales are site-specific, urban ones, where "natural quiet" did not already exist to any appreciable degree, particularly with the 500-foot above ground level altitude agreements in effect. These locales are in no way comparable to those of much more vast territory, much of it wilderness, and much of it relatively quiet. The sightseeing objective of those two examples is to swoop around a single entity. Similarly, NATA (comment 4229) claims that while these self-regulated, self-policing cases have been successful for those specific parks, no air tour operators currently provide service to the RMNP, and no agreements can be made between the government and "air tour operators which may exist in the future."

### **Response to Comments**

As will be described in greater detail below, the comments offered many cogent and informative remarks for consideration by the FAA. The number and quality of the comments received demonstrated to the FAA the importance and complexity of this issue as it relates to RMNP. All comments were thoroughly read and analyzed.

Many of the commenters offered similar arguments for either acceptance or rejection of the various alternatives presented in the NPRM. Due to the vast number of the comments, the section below is a summary of the assertions alleged in the comments and the corresponding response by the FAA.



airspace. In addition, safety remains the FAA's primary consideration and plays a necessary and integral role in any decision made by the agency.

The allegation that the NPS has assumed jurisdiction for the management of the national airspace is unfounded. The FAA and NPS worked closely together, however, to base any regulatory action on FAA's statutory authority and responsibility. Toward this end, for example, no action was even proposed until the FAA made a determination that there would be no adverse effect on aviation safety in navigable airspace from any of the proposals stated in the NPRM.

Several commenters argued that the FAA lacked the authority to regulate a problem that "does not exist." These commenters argue that it is premature for the FAA to regulate this area, where commercial air tours do not presently operate over RMNP. The Administrator of the FAA is charged with the duty of regulating the use of the navigable airspace, adopting regulations deemed necessary to abate aircraft noise, and protecting persons and property on the ground. The Administrator has the authority to regulate whenever previous history or evidence has revealed a propensity for future problems.

The FAA acknowledges that each of the national parks differ in their topography, nature, size and purpose, but certain experiences found in one park also occur in other parks. Experience with commercial air tour operations in Badlands National Park, Bryce Canyon National Park, Glacier National Park, Glacier Bay National Park, Great Smokey Mountains National Park, Grand Canyon National Park and Mt. Rushmore National Memorial have demonstrated the rise in the number of commercial air tour operations conducted over the parks and a concomitant increase in the noise from such operations.

For example, at Glacier National Park, The NPS estimates that from 1986-1996 the number of fixed wing and helicopter tours at the park increased from 100 to 800 and the number of tour operators from one to five. At Badlands National Park, NPS estimates that the single air tour operator offering helicopter tours conducted over 400 flights in a five month period, or an average of three flights per hour during peak periods. These flights are repetitive in nature concentrated in two basic circular flight patterns over the same area again and again, constantly disturbing the quiet of the park. The air tour operations have led to numerous complaints by visitors to the park.

Bryce Canyon has air tour operations from several locations within the vicinity of the park. At Bryce Canyon Airport, located 3.5 miles north of the park, NPS reports that the number of enplanements has increased dramatically from 1299 in 1991 to approximately 4700 per year in the current year. Likewise, the number of air tour operators, from all locations, has increased from one to five. At the Mt. Rushmore National Memorial, the Park Service estimates that the number of overflights has increased from 2400 per year to 4000 per year along with an increase of tour operators from one to four. All of the tour operators use helicopters and the majority of these flights are concentrated in the summer months at the rate of approximately 30 per day.

In addition, the Park Service has conducted a survey of park users at RMNP, which indicated that ninety-three percent of visitors considered tranquility to be an "extremely" or "very" important value in the park. Approximately ninety percent of the visitors surveyed stated that noise from helicopter tours would affect their enjoyment of the park. A copy of the survey has been placed in the docket of this proceeding.

Based upon this information from RMNP visitors, the growth of tour operations at these other parks, and the apparent representations of potential tour operators, the FAA has concluded

expected and desired by visitors to the park.

While the FAA has determined that a permanent rule regarding oversights of Rocky Mountain National Park by commercial tour operators should be made part of the overall rulemaking on overflights of all national park units, the FAA is taking this temporary action now to avert the introduction of such operators into RMNP while the national rule is completed. The experience gained from other national parks forms part of the basis for the Administrator's decision to move at this time to protect Rocky Mountain National Park.

#### *Administrative Procedure Act*

One commenter alleged that the FAA has failed to comply with the Administrative Procedure Act's notice and opportunity for comment requirements by failing to provide sufficient information to allow a meaningful response to Alternative Two. As an example, the commenter suggests that, under Alternative Two, the absence of maps and charts deprives the commenter of a meaningful opportunity to analyze the proposed routes.

Section 553(b) of the Administrative Procedure Act provides that "notice shall include— (3) either the terms of substance of the proposed rule or a description of the subjects and issues involved." Under the alternatives section, the FAA solicited comments on numerous proposals, while requesting new ideas on possible restrictions. The Agency received many comments on the proposed alternatives, but no new alternative that had not already been proposed. (Had the FAA received a new, significantly different, proposal on which it relied, the FAA would have issued a Supplemental NPRM to solicit comments on the new proposal prior to taking action.) The number and specificity of the received comments demonstrate a general understanding of the proposed alternatives. Therefore, the FAA concludes that it has provided sufficient detailed information concerning the description of the subjects and issues involved to comply with the terms of the Administrative Procedure Act by affording interested parties with a meaningful opportunity to comment on the proposal.

#### *"Natural Quiet" Standard*

One commenter challenged the action of the FAA as proposed in the NPRM by alleging that the actions of the FAA exceeded the Congressional mandate provided under Public Law 100-91 to substantially restore the natural quiet of the Park, because that standard was devised solely for the protection of the Grand Canyon. The commenter further opined that the attempt to achieve "natural quiet" in RMNP was inappropriate and without any Congressional mandate.

It is true that Public Law 100-91 was directed to restoring the "natural quiet" of Grand Canyon National Park only and not to the other parks in the national system. Public Law 100-91 provides for the substantial restoration of the natural quiet and experience of the Grand Canyon National Park and protection of public health and safety from adverse affects associated with aircraft overflights. The FAA is taking separate action on restoring the quiet of Grand Canyon National Park.

In this final rule, however, the FAA is carrying out President Clinton's directive to promote natural quiet at Rocky Mountain National Park. As noted above, the President's *Parks for Tomorrow* initiative specified that the restoration of natural quiet, and the natural enjoyment of RMNP are goals to be addressed by this rulemaking. By promulgating this final rule, the FAA is cooperating with the NPS to further the goal of protecting Rocky Mountain National Park, its environment, and visitors' enjoyment, to ensure that the potential problems associated with noise from commercial air tour operations do not arise while a long-term solution is

scope of the mandate was limited to the impacts of aircraft overflight on the national park system with distinctions to be made among various categories of aircraft overflights. The law made no provision to identify or compare any impacts on the national park system from other activities or sources. To the extent that other activities, such as ground transportation, may have an adverse effect on parks' environment or visitor experience, these effects can be dealt with by the NPS under its authority.

#### *NEPA Requirements*

Some commenters maintain that the FAA should prepare an environmental impact statement (EIS) pursuant to the National Environmental Policy Act of 1969, prior to issuing the final rule because they contend that implementation of any of the alternatives of the proposed SFAR, except the ban alternative (Alternative 1), will have a significant adverse affect on the quality of the human environment.

According to the FAA's Environmental Order 1050.1D, the final rule is a Federal action which requires compliance with the NEPA. Consistent with the FAA Order 1050.1D, Para. 35, the FAA prepared a draft environmental assessment (DEA). The DEA did not disclose potentially significant direct or indirect impacts affecting the quality of the human environment. On November 21, 1996, the FAA announced the availability of the DEA for notice and comment. The comment period on the DEA remained open until December 23, 1996. Based on the comments received on the DEA and further analysis, the FAA has issued a Final EA. The FAA has determined that no additional environmental analysis is required and has issued a finding of no significant impact (FONSI). The final EA and FONSI has been issued and is available for review in the Docket. For copies of the documents, contact the person listed in the "FOR FURTHER INFORMATION CONTACT" section listed above.

This final rule constitutes final agency action under 49 U.S.C. 46110. Any party to this proceeding having a substantial interest may appeal the order to the courts of appeals of the United States or the United States Court of Appeals for the District of Columbia upon petition, filed within 60 days after entry of this Order.

#### *EPA Consultation*

One commenter states that the NPRM does not cite a statutory basis for the proposed action, but if the basis is 40 U.S.C. 44715, the FAA failed to consult the EPA.

The FAA is, in fact, relying on 40 U.S.C. 44715 and has consulted with EPA. The EPA believes that the environmental assessment adequately supports a finding of no significant impact.

#### *Airline Deregulation Act*

Another commenter believes that by promulgating the NPRM, the FAA has violated Section 102 of the Airline Deregulation Act of 1978 by failing to: (1) Encourage the entry of new carriers into air transportation, (2) foster the expansion of existing carriers into additional air transportation markets, and (3) insure the existence of a competitive airline industry. The commenter cites the possibility that interstate operators might become interested in commercial air tours in the future.

The statutory obligation to encourage development and competition among air carriers is not unconstrained. The FAA has authority to regulate, restrict, or prohibit activities by operators when necessary in the public interest. The final rule effects a temporary ban on commercial

of commercial air tours, is to avoid the unnecessary interruption of established commercial service by whatever regulation is adopted in the broader national rulemaking now underway on park overflights.

This rulemaking arose in response to public demand. The policy for preserving the natural enjoyment at our national parks has been formulated by the FAA to facilitate the adaptation of the air transportation system to the present and future needs and interests of the public. Any potential air tour operator currently evaluating whether to provide air tour operations within Rocky Mountain National Park will be able to participate in the development of the rulemaking on national park overflights at all parks, including RMNP.

#### *Americans With Disabilities Act*

Several comments were received alleging that the final rule will violate the Americans With Disabilities Act, §2(a)(8) by depriving disabled persons of equal opportunity for full participation in the enjoyment of the Rocky Mountain National Park. According to these comments, commercial air tour operations will be the only way disabled individuals can enjoy the vistas of RMNP.

To the contrary, Rocky Mountain National Park offers an unique opportunity for disabled individuals to enjoy its spectacular vistas via its extensive road system. Approximately 54% of the RMNP can be viewed from some point along its 149 miles of winding road. In this aspect, RMNP is unique in its ability to provide access to recreational experiences via trails which allow access to backcountry and scenic vistas. Moreover, the NPS has established facilities and programs within RMNP to enhance the opportunities for visitors with disabilities to experience the Park. Thus, FAA believes that this rule does not violate the ADA.

#### *Economic Costs*

One commenter suggested that the FAA should conduct a cost/benefit analysis to determine whether the costs of implementing the NPRM will exceed its ultimate value to society. The imposition of this ban will not have an economic impact on commercial air tour operations over RMNP today because they are non-existent. Nor does the FAA consider it probable that significant levels of new services will arise during the temporary period between adoption of this rule and completion of the more comprehensive rulemaking on national park overflights. The FAA's intent is specifically to avert economic damage to commercial air tour operators by acting prior to one or more operators commencing business on the assumption that they will be allowed to operate over RMNP once the general rule is adopted. By acting expeditiously, the FAA will enable these operators to avoid making the capital investments necessary to engage in these operations that may be subject to future restrictions as part of the national rule.

However, it would be an error to minimize the true impetus for the final rule which is to preserve the natural resources at RMNP, including the quiet and solitude. In this respect, it is difficult to assign a monetary value to the benefit to be gained by this rule. Specifically with respect to the economic value attached to the preservation of environmental values, some economic analysis models (such as use of a "willingness to pay" analysis) could ascertain an economic value to society of such an asset. However, such analysis is not necessarily directly comparable in a cost/benefit basis with the economic valuations of costs and benefits that the FAA undertakes for other rulemakings. As a result, the information provided through such an effort would have little analytical or probative value.

terminate when national standards are adopted. However, in view of the strong local demand for action to ensure preservation of Rocky Mountain National Park and the ripeness of this proceeding, the FAA is taking the opportunity to establish temporary protective measures at RMNP while the national standards are being adopted. By Presidential Declaration dated April 22, 1996, the President directed the Secretary of Transportation to consider and draft a Notice of Proposed Rulemaking that would propose national standards for air tour overflights of the national parks. The FAA is working on that national rule currently and will follow rulemaking procedures, including proceeding with notice and opportunity for comment, prior to taking any final action. The FAA has designed its Rocky Mountain National Park rule to terminate on the adoption of national standards.

Certain commenters raised an objection that even though the air tour ban would apply to only commercial air tour operators, the rule proposed still represents an undue threat to the public right, including that of general aviation aircraft, to transit the navigable airspace of the United States. This final rule is strictly limited to overflights by commercial air tour operators over RMNP. Air tour operations differ from general aviation operations in the frequency of trips and their operational altitudes. In addition, air tours generally operate over picturesque areas where ground traffic congregates and at altitudes intended to maximize contact with these areas. Therefore, air tour operations are distinguishable from general aviation operations to such a degree as to remove any perceived threat to the right of general aviation aircraft to transit RMNP. Under the provisions of the final rule, all other aircraft will remain undisturbed in their current routes and altitudes of flight.

#### *Quiet Technology*

Another commenter recommends that rather than banning commercial air tours over the RMNP, the FAA should follow the recommendations of a 1994 report to Congress where the NPS suggested the use of quiet aircraft technology as a means of reducing the noise effect on National Parks. The NPS report to Congress suggested that quieter aircraft could be used in substantial restoration of natural quiet in Grand Canyon National Park (GCNP). It identified Dtt C-6-300, Vistaliner and Cessna 208 Caravan airplanes, and the McDonnell Douglas "No Tail Rotor" helicopters as the quietest aircraft currently operating in GCNP. The NPS made this determination based on its evaluation of aircraft certification data derived from applicable noise certification standards in Part 36 of Title 14 of the CFR, and from NPS flyover noise measurements taken in the park. Because of the temporary nature of this rule, the FAA determined that quiet technology would not provide an adequate alternative. Quiet technology ultimately holds great promise for ensuring the compatibility of air tour overflights and the maintenance of quiet for ground-based visitors of national parks. Indeed, movement toward the use of quiet technology forms a cornerstone of the FAA's proposal for a long-term solution to overflights of the Grand Canyon. And the FAA will want to explore the role quiet technology should play in the national rule. However, for this interim period, a temporary ban on commercial air tour operations will maintain the status quo and allow an orderly resolution of questions pertaining to quiet technology and other issues. To the extent that technological change would allow the operation of commercial air tours within RMNP in a manner consistent with the protection of the Park, its resources, and its enjoyment by visitors, the FAA will review this rule in the future.

#### *The Lack of Air Tour Operators*

Certain commenters questioned whether this rule was even necessary, because aerial tours do not operate over RMNP for obvious reasons: the high altitudes of the park; aircraft loading

operations at RMNP.

The fact that commercial air tour service is being contemplated for RMNP supported the FAA determination that immediate action was necessary to preserve the natural enjoyment of visitors to RMNP by implementing a *temporary* ban on commercial air tour operations. In addition, the FAA believes it is critical to act expeditiously on this matter to avoid any potential environmental and economic impact.

#### *Alternatives*

As previously mentioned, the FAA is attempting to implement a regulation over RMNP that achieves the goal of preserving the natural enjoyment of the Park by visitors by averting the future and potential adverse effects of aircraft noise. The comments received on the alternatives were crucial in the FAA's decision. Based on the comments, the FAA determined that Alternatives 2 and 3 would not achieve the desired goal. Therefore, the FAA has determined that the best alternative in application and result would be Alternative One on a temporary basis.

In response to the voluntary agreement alternative and the comments received on that alternative, the FAA determined that since there are currently no air tour operators conducting operations over the Park, there are no operators to participate in a meaningful discussion and negotiation with the NPS officials at the Park. The FAA is appreciative of the willingness of certain aviation groups, such as USATA and HAI, to participate in the drafting and implementation of a voluntary agreement. However, without actual operators that would be willing to be made a party to the voluntary agreement, the FAA determined that this alternative would not achieve its desired goal.

Alternative 2 proposed to permit sightseeing tours with several suggested limitations. The FAA partially agrees with some of the commenters who stated that the imposition of partial restrictions would not provide a meaningful result for the commercial air tour operators or achieve the goal of this rulemaking. Moreover, in reviewing the different options that could be used in conjunction with air tour restrictions listed in Alternative 2, the FAA concluded that the application of these options would be operationally difficult for the commercial air tour operators. The terrain within RMNP is quite varied and irregular, with mountain peaks and valleys differing in elevations by thousands of feet. This forces a pilot to be more attentive to the varying topography.

The FAA agrees with the commenters that cited the difficulty in requiring air tour operators to conduct operations only over the existing roadways in RMNP. Certain flight corridors may become necessary in the future, but their establishment will necessitate a much more comprehensive aeronautical and environmental review that just designating the existing roadways. Given the challenging operational environment, the FAA agrees with those comments which claim that restrictions based on the season, time of day, or day of the week would be economically unfeasible for air tour operators.

As noted above, the FAA can reasonably infer from the varied and instructional information received at other parks as to the effects of aircraft noise due to commercial air tour operations. An altitude restriction that would increase the minimum altitude above 2,000 feet above ground level would still have the potential to adversely impact both visitors and resources. Therefore, the FAA determined that the most efficient method of mitigating the potential adverse effects from aircraft noise in this particular case would be to place the preemptive ban on all commercial air tour operations.

at a number of units of the national park system, and are growing in popularity in others. Many park areas have either documented or estimated significant increases in the volume of air tour activity over the last ten years. For example, air tour flights over Grand Canyon National Park have increased from a few hundred flights per year in the 1960's, to 40,000 to 50,000 per year in 1986, to 80,000 to 95,000 per year in 1996, with up to 40 companies offering sightseeing flights over the park, according to industry, FAA and/or media estimates. Experience at Hawaii Volcanoes and Haleakala National Park in Hawaii has been similar in trend but lower in magnitude, with highs of 23,000 flights per year and 10 operators estimated at Hawaii Volcanoes.

Hard statistics are lacking on the number of sightseeing operations conducted over national park areas because, with the exception of recent fee legislation for Grand Canyon, Hawaii Volcanoes, and Haleakala National Parks, there are no requirements for operators to provide such data. Even at the three parks in the fee legislation, accurate data has not been readily available. In virtually all cases, overflight data has to be estimated based upon a variety of sources, such as airport operations data, limited field observations, FAA projections for airport master planning, industry publications, and voluntary responses to surveys and requests for information.

The trends based upon such numbers indicate increasing interest and levels of sightseeing operations over many national park areas, which correlates with trends for ground visitation. For example, Glacier National Park estimates that between 1986 and 1996 the number of overflights increased from 100 to 800 per year, and the number of commercial air tour operators increased from one to five. Mount Rushmore estimated an increase from 2,400 to 4,000 overflights and from one to four operators during the same time period. Sightseeing tour operators have become based within a few miles of the park boundary during the past two years at Bryce Canyon and Canyonlands, with major expansion of airport facilities either proposed or approved to accommodate increasing tour operations at both places. At present, a new helicopter tour operation is in the process of starting up at Chickamauga-Chattanooga National Military Park.

The extended comment period closed on December 23, 1996. Forty-nine submissions were received during the reopened comment period, most of which were substantive comments on the proposed rule. Many of the commenters during the reopened period had commented previously, but were either supplementing their prior comments or were adding to or extending their arguments.

Thirty-one commenters used the reopened comment period to express overall support for a complete ban on commercial tour overflights. These include the comments from the Estes Valley Improvement Association, the Town of Grand Lake, CO, the National Parks and Conservation Association, the Poudre Canyon Group of the Sierra Club, the Estes Park League of Women Voters, and the League of Women Voters of the United States and numerous individuals. These commenters typically stressed the need to maintain the natural enjoyment of the Park's solitude and quiet and argued that overflights by commercial air tour operators would adversely affect that enjoyment. Among those expressing general opposition to the proposal were several other individuals and Bell Helicopters Textron, Inc. Every comment submitted during the reopened comment period was read and considered, although neither all comments nor all points raised will be addressed individually in this preamble. Many of the arguments presented are similar to those that were submitted earlier and discussed above. Several comments, however, suggested new arguments against the imposition of a ban on commercial tour overflights, and these are discussed below.

requested that the DEA be withdrawn and/or the comment period extended to allow additional time for further analysis. However, several commenters such as the League of Women Voters, the Estes Valley Improvement Association, Inc., and the Town of Grand Lake, stated that the time allowed was sufficient to analyze the DEA and found the document adequate in its review of the relevant environmental consequences associated with this rule. Further, as discussed above, the FAA believes that prompt completion of this rulemaking is necessary, because the proposed ban on commercial air tours contained in the NPRM may affect the business and investment decisions of operators. Therefore, while in the abstract it is always desirable to have more rather than less time for public comments, that desire must be balanced against the need to complete the rulemaking in a timely manner. This means that the temporary ban should be implemented before any air tour operator attempts to start commercial air tour operations at RMNP and then is adversely affected financially by the imposition of the subsequent ban. Experience at other national park units suggests that while commercial air tour operations do not cease in the winter months, the number of commercial air tour operations in the winter (as well as the number of new start-up air tour businesses) is not as high as in the warmer months of the year. Therefore, the FAA wants to impose the temporary ban in the more dormant months of the year before new air tour operations are started.

Even though the comments offered by Southwest Safaris (Safaris) focus on the DEA, Safaris alleges certain points that pertain both to the DEA and this final rule. Safaris argues, among other things, that the FAA has no basis on which to ban overflights by commercial air tour operations, because there are no such operations currently. In the absence of such operations, Safaris argues, there is no "measurable" need to prohibit them. Safaris also dismisses National Park Service data indicating that approximately 90 percent of park visitors surveyed stated that noise from helicopters would affect their enjoyment of the park. ("In the last sentence, the word, 'would,' does not mean 'does.' The impact of helicopter noise over RMNP is entirely hypothetical.") The problem with Safaris' argument is that it necessarily implies that the FAA has no authority to act to prevent reasonably foreseeable problems before they occur, and this is simply false. The agency is not obliged to wait until damage occurs before exercising its authority to stop such damage. This issue arises more frequently in the safety context, where most of FAA's regulations arise, but it applies with no less force in the exercise of FAA's other authorities.

Safaris also challenges the FAA's right to apply information gained from experience with commercial tour overflights of other national parks to RMNP. While each park has unique characteristics, the FAA believes that some general understanding can be gained with respect to the business of conducting tour overflights, including its growth pattern and market considerations. The FAA's and NPS experience extends as well to an appreciation of the effect of such overflights on park visitors and resources. While specific topography and park characteristics must be taken into account, the agencies general knowledge can and must inform its projections about the nature and effects of any air tour operations at RMNP. The FAA acknowledges that additional information would improve our ability to forecast specific noise impacts. The agency has determined to impose only a temporary ban on commercial tour overflights at RMNP while a broader rule is considered. This rulemaking allows the FAA to prevent an overflight problem from air tour overflight from developing in RMNP, as it has in so many other national parks.

Safaris goes on to argue, as does the Northern California Airspace Users Working Group, that air tour operations increase rather than diminish the value of parks, and that compared to automobile visitors, air tour visitors cause less damage to park resources. The FAA will not be drawn into any attempt to compare the benefits and costs to park resources of air



HAI argues that the NPRM should be withdrawn because, in HAI's view, the regulatory language is too vague to be enforceable. HAI claims that the proposed rule would prohibit regional air carrier and on-demand air taxi flights that now traverse the park. The FAA has already addressed the argument that a prohibition on air tours at RMNP would also apply to other kinds of air operations. The short answer is that it would not. The FAA has the same response to the comment of the Soaring Society of America. The Soaring Society's comment argues that gliders do not pollute measurably, either in noise or emissions, and it states the Society would therefore oppose a general ban of aircraft flights over a National Park. The FAA has not imposed any general ban on all aircraft at Rocky Mountain National Park. Only commercial air tour operations would be affected by the temporary ban adopted in this rule.

As to HAI's suggestion here that air tour operations cannot be distinguished from point-to-point service, we believe that neither the operators nor the FAA will have any difficulty in understanding the difference between the high-frequency air tour service that concentrates at places of particular interest and flights that travel as directly as feasible between two distant cities, and happen to traverse the park on a particular route. However, if HAI believes, as it says, that a more specific definition is necessary, we invite HAI to propose one, either for future use at RMNP or as part of the development of a national rule on air tour overflights at national parks.

### **Regulatory Evaluation**

Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Office of Management and Budget directs agencies to assess the effects of regulatory changes on international trade. In conducting these analyses, the FAA has determined that this rule is a "significant regulatory action" as defined in the Executive Order and the Department of Transportation Regulatory Policies and Procedures.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) helps to assure that Federal regulations do not overly burden small businesses, small non-profit organizations, and airports located in small cities. The RFA requires regulatory agencies to review rules which may have "a significant economic impact on a substantial number of small entities." A substantial number of small entities, defined by FAA Order 2100.14A—"Regulatory Flexibility Criteria and Guidance," is more than one-third, but not less than eleven, of the small entities subject to the existing rule. To determine if the rule will impose a significant cost impact on these small entities, the annualized cost imposed on them must not exceed the annualized cost threshold established in FAA Order 2100.14A.

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Office of Management and Budget directs agencies to assess the effects of regulatory changes on international trade. In conducting these analyses, the FAA has determined that this rule is "a significant regulatory action" as defined in the Executive Order and the Department of Transportation Regulatory Policies and Procedures.

Since the impacts of the changes are relatively minor as well as temporary, a full regulatory analysis, which includes the identification and evaluation of cost-reducing alternatives to this rule, has not been prepared.

### *Costs*

At present there are no air tour operations over RMNP and, despite some expression of interest, none have taken definitive action to initiate service at this time. Considering the historical record, the FAA assumed that this final rule will not lead to increased costs to an operator over the next ten years since there are no operators. Moreover, applications for air tour operations have been repeatedly turned down by the town of Estes Park, and it is unlikely that opposition to air tour operators will lessen over time there.

However, while there are no air tour operators that are currently expected to operate in RMNP, information supplied to the docket shows that from time to time small operators have tried to gain approval for operating over RMNP from local authorities. In order not to overlook the potential costs imposed by this rule to potential operators in this analysis, the FAA has attempted to estimate this potential cost. To estimate the potential costs to these potential operators, the FAA employed recent data from the proposed rulemaking on "Flight Rules in the Vicinity of Grand Canyon National Park."

Financial data from two small scheduled fixed wing operators and a helicopter operator that operate over the Grand Canyon were utilized. The three operators chosen are: a 5 passenger CE 206 operator, a 3 passenger Piper Pa-28-180 airplane operator, and a SA-341-G helicopter operator. The estimated annual operating revenues for these operators are respectively, \$53,000, \$10,000, and \$16,000.

Even if the FAA assumes that three relatively small operators would eventually gain authority to operate over RMNP in the next ten years, the costs will still be quite small. The FAA estimates costs in lost revenues to operators due to this rule will range from zero, which is most likely, to \$79,000 per year if three operators are denied the ability to do business over RMNP due to the rule.

### *Benefits*

This rule serves to preserve the desired state of quiet and solitude in the park. Currently, the natural enjoyment of the Park is not disturbed by air tour operators and will not be after the rule is promulgated.

### *Conclusion*

Small entities potentially affected by the final rule are potential air tour operators that in the absence of the rule would operate over Rocky Mountain National Park. The FAA estimates from zero to three operators might be affected by the rule, well below the substantial number criteria. The FAA thus concludes that there will not be a significant economic impact on a substantial number of small entities.

### **International Trade Impact Analysis**

The final rule will not have any impact on international trade because the potentially affected operators do not compete with foreign operators. The rule also will not constitute a barrier to international trade, including the export of U.S. goods and services to foreign countries and the import of foreign goods and services to the United States.

### **International Civil Aviation Organization and Joint Aviation Regulations**

In keeping with United States obligations under the convention on International Civil Aviation, it is FAA policy to comply with International Civil Aviation Organization Standards and Recommended Practices (SARP) to the maximum extent practicable. For this action, the FAA has reviewed the SARP of Annex 10. The FAA has determined that this action will not present any differences.

### **Paperwork Reduction Act**

In accordance with the Paperwork Reduction Act of 1995 (Pub. L. 104-13), there are no requirements for information collection associated with the proposed regulation.

### **Conclusion**

For the reasons set forth above, the FAA has determined that this rule is a significant regulatory action under Executive Order 12866. The FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This rule is considered significant under DOT Regulatory Policies and Procedures.

### **The Amendment**

The FAA wishes to be responsive to concerns about the effects of overflights on the national park system. For that reason and due to the unique situation at RMNP the FAA is temporarily banning commercial air tour operations in the vicinity of the RMNP for sightseeing purposes for the limited duration of the SFAR. In consideration of the foregoing, the Federal Aviation Administration amends Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 119, 121, and 135 effective February 7, 1997.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. 106(g), 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46502, 46504, 46506-46507, 47122, 47508, 47528-47531.

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the operation of an aircraft carrying passengers for compensation or hire for aerial sightseeing.

**【Section 3. *Restriction.*** No person may conduct a commercial air tour operation in the airspace over Rocky Mountain National Park, CO.

**【*Expiration:*** This SFAR will expire on the adoption of a final rule in Docket No. 27643.】

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553(b) are impracticable and contrary to the public interest. Further, I find that good cause exists for making this rule effective immediately upon issuance. I also find that this action is fully consistent with my obligations under 49 U.S.C. 40105(b)(1)(A) to ensure that I exercise my duties consistently with the obligations of the United States under international agreements. The Department of State has been advised of, and has no objection to, the action taken herein.

This rule shall remain effective until further notice.

### **Regulatory Evaluation**

#### *Benefits*

This regulation will generate potential benefits in the form of ensuring that the current acceptable level of safety continues for U.S. commercial air carriers and other operators. Since this action is promulgated prior to the occurrence of a serious incident resulting in loss of life or damage to or destruction of property, there are no statistics from which a quantitative estimate of benefits can be derived.

#### *Costs*

The SFAR will impose a potential incremental cost of compliance in the form of the circumnavigation (including the additional time for preflight planning) of the Pyongyang FIR. Based on information available to informed FAA personnel, there are no U.S. air carriers or commercial operators currently conducting revenue flights within the Pyongyang FIR, and therefore none that will be adversely affected by this action.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by Federal regulations. The RFA requires a Regulatory Flexibility Analysis if a proposed rule would have "significant economic impact on a substantial number of small entities." FAA Order 2100.14A outlines the FAA's procedures and criteria for implementing the RFA. The FAA has determined that none of the U.S. air carriers affected by the SFAR are "small entities" as defined by FAA Order 2100.14A. Thus, the SFAR would not impose a "significant economic impact on a substantial number of small entities."

### **Paperwork Reduction Act**

This rule contains no information collection requests requiring approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3507 *et seq.*).

### **International Trade Impact Assessment**

This final rule could have an impact on the international flights of U.S. air carriers and commercial operators because it will restrict their ability to fly through the Pyongyang FIR and therefore may impose additional costs relating to the circumnavigation of this airspace. This final rule, however, will not restrict the ability of foreign air carriers to fly through the Pyongyang FIR (unless they are carrying passengers under a code-share arrangement with a U.S. carrier). Given the narrow scope of this rule, it will not eliminate existing or create additional barriers to the sale of foreign aviation products in the United States or to the sale of U.S. aviation products and services in foreign countries.

### **Conclusion**

For the reasons set forth above, FAA has determined that this action is not a "significant regulatory action" under Executive Order 12866. This action is considered a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). The FAA has determined that none of the U.S. air carriers affected by the SFAR are "small entities" as defined by FAA Order 2100.14A. Thus, the FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **The Amendment**

For the reasons set forth above, the Federal Aviation Administration is amending 14 CFR part 91 effective April 24, 1997.

The authority citation for part 91 continues to read as follows:

*Authority:* 49 U.S.C. 106(g), 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46502, 46504, 46506-46507, 47122, 47508, 47528-47531.

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(c) All operators of aircraft registered in the United States except where the operator of such aircraft is a foreign air carrier.

**【2. *Flight Prohibition.***

(a) Except as provided in paragraphs 2(b), 3, and 4 of this SFAR, no person described in paragraph 1 may conduct flight operations through the Pyongyang FIR.

(b) Flight operations within the Pyongyang FIR east of 132 degrees east longitude are prohibited until the FAA determines, based on information from the DPRK civil aviation authority, that the proper level of operational overflight safety can be assured. The FAA will amend this SFAR and publish a Notice to Airmen (NOTAM) to permit flights east of 132 degrees east longitude once this determination is made.

**【3. *Permitted operations.*** This SFAR does not prohibit persons described in paragraph 1 from conducting flight operations within the Pyongyang FIR where such operations are authorized either by exemption issued by the Administrator or by another agency of the United States Government with FAA approval.

**【4. *Emergency situations.*** In an emergency that requires immediate decision and action for the safety of the flight, the pilot in command on an aircraft may deviate from this SFAR to the extent required by that emergency. Except for U.S. air carriers and commercial operators that are subject to the requirements of 14 CFR part 121, 125, or 135, each person who deviates from this rule shall, within ten (10) days of the deviation, excluding Saturdays, Sundays, and Federal holidays, submit to the nearest FAA Flight Standards District Office a complete report of the operations of the aircraft involved in the deviation, including a description of the deviation and the reasons therefore.

**【5. *Expiration.*** This Special Federal Aviation Regulation No. 79 will remain in effect until further notice.]

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**SUMMARY:** This action prohibits certain flight operations within the airspace controlled by the Democratic People's Republic of Korea (DPRK) by any United States air carrier or commercial operator; by any person exercising the privileges of an airman certificate issued by the FAA, except such persons operating U.S.-registered aircraft for a foreign air carrier; or by an operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. The DPRK is opening its airspace to routine international overflights. On April 7, 1997, the U.S. government lifted its prohibition on the payment of overflight fees to the DPRK, effectively opening the airspace to U.S. operators. However, pending the resolution of outstanding questions related to safety of flight operations in the area, the FAA will maintain a prohibition on certain flight operations within the Pyongyang Flight Information Region (FIR). The combination of the DPRK's military capabilities, rules of engagement, and inexperience in managing international civil aircraft poses a threat to civil aircraft in certain areas of the Pyongyang FIR. As a result, the FAA is prohibiting certain flight operations in the Pyongyang FIR. The FAA will consider authorizing U.S. flight operations east of 132 degrees east longitude following the review of applicable safety information received from the DPRK and an FAA determination that the proper level of safety for the overflights can be assured.

**FOR FURTHER INFORMATION CONTACT:** Patricia Lane, Airspace and Air Traffic Law Branch (AGC-230), or Mark W. Bury, International Affairs and Legal Policy Staff (AGC-7), Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3515.

#### **SUPPLEMENTARY INFORMATION:**

##### **Availability of Document**

An electronic copy of this document may be downloaded using a modem and suitable communications software from the FAA regulations section of the Fedworld electronic bulletin board service (telephone: 703-321-3339), the Federal Register's electronic bulletin board service (telephone: 202-512-1661), or the FAA's Aviation Rulemaking Advisory Committee Bulletin Board service (telephone: 800-FAA-ARAC).

Internet users may reach the FAA's web page at <http://www.faa.gov> or the Federal Register's webpage at [http://www.access.gpo.gov/su\\_docs](http://www.access.gpo.gov/su_docs) for access to recently published rulemaking documents.

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Rulemaking (ARM-1), 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-9680. Communications must identify the SFAR number or docket number of this document.

Persons interested in being placed on the mailing list for future rules should request from the above office a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, that describes the application procedure.

##### **Background**

The DPRK is opening its airspace to routine international overflights. The Office of Foreign Assets Control (OFAC), Department of Treasury, had prohibited the payment of overflight fees to the DPRK, effectively closing DPRK airspace to U.S. operators. On April 7, 1997,

furnish the requirements of national security as being in the public interest. Section 1701(c) of Title 49, United States Code, provides the FAA with broad authority to carry out this policy by prescribing regulations governing the practices, methods, and procedures necessary to ensure safety in air commerce.

In the exercise of these statutory responsibilities, the FAA has determined that the combination of various factors in the DPRK poses a potential threat to civil aircraft flying through the Pyongyang FIR. Tensions on the Korean peninsula occasionally run high, and as a result the DPRK maintains a high state of military readiness. The DPRK military has emphasized the air defense of the Korean demilitarized zone (DMZ) and of areas further removed from the DMZ, particularly the capital city, Pyongyang. The DPRK air defense system includes modern surface-to-air missile systems and interceptor aircraft capable of engaging aircraft at cruising altitudes. The FAA has been unable to determine the current level of coordination and cooperation between civil air traffic authorities and air defense commanders for civil aircraft overflights, including military rules of engagement if an aircraft strays from its assigned flight route. Any lack of coordination presents a risk that civil aircraft operating in the Pyongyang FIR west of 132 degrees east longitude could be misidentified as a threat by the DPRK.

Given the DPRK's air defense capabilities, including its rules of engagement and limited capability to distinguish between military and civil aircraft, the FAA has determined that civil aircraft operating in the Pyongyang FIR west of 132 degrees east longitude could be misidentified and inadvertently engaged by the DPRK. This potential threat justifies the imposition of certain measures on U.S. flight operations to ensure the safety of U.S.-registered aircraft and operators considering flight operations in the Pyongyang FIR west of 132 degrees east longitude.

Further, since the FAA has not yet reviewed all applicable safety information provided by the DPRK and necessary for operators to meet international safety standards prescribed by the International Civil Aviation Organization, it has not determined that the proper level of operational overflight safety can be assured east of 132 degrees east longitude. Remaining issues for review include differences from ICAO standards, if any; search and rescue capabilities and procedures; DPRK military pilot training in the proper civil aircraft intercept procedures; and communications links other than air-ground communication. The FAA also needs to publish related information for its International Flight Information Manual. Once this information is reviewed and published, the FAA is prepared to amend this SFAR as warranted to permit flights east of 132 degrees east longitude and to publish a Notice to Airmen (NOTAM) indicating that such flights are permitted and where to find the information supplied by the DPRK.

#### **Prohibition Against Certain Flights Within the Flight Information Region of the Democratic People's Republic of Korea (DPRK)**

On the basis of the information above, and in furtherance of my responsibilities to promote the safety of flight of civil aircraft in air commerce, I have determined that immediate action by the FAA is required to ensure there is no damage to or loss of U.S.-registered aircraft or injury to U.S. operators conducting flights through the Pyongyang FIR. I find that the current air defense capabilities in the DPRK, as well as the need to review safety information from the DPRK necessary to determine the proper level of operational overflight safety, presents a potential hazard to the operation of civil aircraft in the Pyongyang FIR. Accordingly, I am ordering a prohibition of flight operations within the Pyongyang FIR by any U.S. carrier or commercial operator; by any person exercising the privileges of an airman certificate issued by the FAA, except persons operating U.S.-registered aircraft for a foreign air carrier; or by an operator using an aircraft registered in the United States unless the operator of such aircraft is a foreign air carrier. The FAA will amend this SFAR to permit flight operations east



